UTAH

AIR QUALITY BOARD

Meeting
March 9, 2005

Department of Environmental Quality
Division of Air Quality

File

State of Utah

Department of Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

Air Quality Board
John M. Veranth, *Chair*
Ernest B. Wessman, *Vice-Chair*
Jerry D. Grover
Scott Hirschi
James R. Horrocks
Dianne R. Nielson
Richard R. Olson
Wayne M. Samuelson
JoAnn B. Seghini
Marcelle Shoop
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Richard W. Sprott,
Executive Secretary

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

DAQ-008-05

UTAH AIR QUALITY BOARD MEETING

Work session will be held prior to discuss the PM10 Maintenance Plan
12 – 1 pm
168 North 1950 West (Bldg #2) Room 101

FINAL AGENDA

Wednesday, March 9, 2005
1:30 p.m.

168 North 1950 West (Bldg #2) Room 101

I. Call to Order

II. Date of the Next Air Quality Board Meeting: April 6, 2005.

III. Approval of the Minutes of January 5, 2005, Board Meeting.

IV. Propose for Public Comment: Amend R307-110-10 and Add a New SIP subsection IX.A.10, PM10 Maintenance Plan for Utah County, Salt Lake County and Ogden City; Repeal and Re-enact R307-110-17 and SIP Section IX.H, Emission Limits. (Bill Reiss)

V. Propose for Public Comment: Amend R307-101-2, R307-165, R307-201, R307-204, R307-205, R307-206, R307-302, R307-305, and R307-310; New Rules R307-207 and R307-306. (Colleen Delaney)

VI. Propose for Public Comment: New Rule R307-421, PM_{10} Offset Requirements in Salt Lake County and Utah County; and Propose Modification to R307-101-2, Definitions. (Colleen Delaney)

VII. Information Items
- A. Appeal Of Sevier Power Company Permit And Appeal Of IPP Unit 3 Permit. (Fred Nelson)
- B. Schedule for NSR Reform Stakeholder Process (Jim Schubach)
- C. Draft SO2 Milestone Report for the Year 2003 (Colleen Delaney
- D. CEED vs EPA Decision by the DC Court of Appeals (Rick Sprott)
- E. Compliance: (Jeff Dean)
- F. HAPS Compliance: (Bob Ford)
- E. Monitoring: (Bob Dalley)

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UTAH AIR QUALITY BOARD MEETING
January 5, 2005
MINUTES

I. Call to Order

John Veranth called the meeting to order at 1:35 p.m.

Board members present:

Jerry Grover	Richard Olson	Marcelle Shoop
Jim Horrocks	Wayne Samuelson	John Veranth
Dianne Nielson	JoAnn Seghini	Ernest Wessman
Executive Secretary:	Richard W. Sprott	

II. Next Meetings.

February 2, March 9, and April 6, 2005. Mr. Veranth announced that Dianne Nielson would remain as the Department Executive Director under the new governor, Jon M. Huntsman, Jr.

III. Approval of the minutes of November 3, 2004, Board Meeting.

- Richard Olson motioned for the minutes to be approved and Ernest Wessman seconded. The Board approved unanimously.

IV. Final Adoption: R307-110-11 and SIP Section IX.B, SO2 Maintenance Plan.
Presented by Bill Reiss

Rick Sprott reported that he had received a request this morning from EPA asking that this item be pulled from the Board agenda. EPA expressed concerns over three issues. One was the modeling associated with refineries that EPA was still reviewing. The other two dealt with the Director's discretion and variance that EPA brought up as issues with the PM10 maintenance plan. It was explained that most SIPs had not made it through the whole process without adjustments after submittal. Staff had spent about three years addressing EPA's previous concerns. Since the material showed that it had been decades since there had been an SO2 exceedence, and with the significant amount of work that had gone into the plan, it was decided to go ahead and allow the Board to consider this action. Staff would continue to work with EPA and try to get a final maintenance plan.

Bill Reiss explained that staff had received comments from EPA as a result of the public comment period in October. Staff met with EPA, and the changes are reflected in the revised maintenance plan. Some of the changes that have been brought to the Board address the historical nature of the improvements that have been made at the Kennecott smelter. Staff asked that the Board give the approval so the plan could be submitted to EPA in the amended form.

Dianne Nielson asked Rick Sprott to clarify the following. In continuing discussions with EPA, could the Board expect amendments in the future? What would be EPA's

reaction if the Board proceeded today, and approved it? Did EPA give any alternatives in the letter and what were the Board options?

Rick Sprott replied that EPA's letter didn't propose any options other than for staff to continue to work through the Director's discretion and the various other issues that the Board is familiar with. Regarding the modeling, EPA hadn't had time to review the new material. During a previous discussion with Dick Long, EPA, it had been agreed that staff would go ahead and process the maintenance plan and submit it to the Board. Any changes would not have to go out for additional public comment, but staff would bring them before the Board. Response to questions from EPA were non substitutive and were for clarification only.

John Veranth asked Rick Sprott to summarize the normal process on how a SIP is handled and sent to EPA.

Rick explained that staff pulls together documentation and goes through the technical analysis that is needed to make changes to the rule. Staff will talk on the phone and/or meet face to face with EPA and try to get it all settled beforehand. This was the process with this plan almost three years ago and the Board put it out for comment. Because of EPA concerns, it was pulled and further work on the modeling was done. The results were sent to EPA with some minor adjustments. When it is submitted, it narrows the scope of the comment and actions to those particular concerns. Staff proposes to work through any issues that EPA has and negotiate to win a partial or complete approval. EPA can approve or disapprove in part.

- JoAnn Seghini moved to make a motion that the Board approve the submission of the Final Adoption of R307-110-11 and SIP Section IX.B, SO2 Maintenance Plan to go to EPA for their final review and approval.

Richard Olson seconded the motion.

Bill Reiss noted that there were additional changes on page 13, Table 4, Notes:, dates were incorrect and needed revision. On line 1, the original attainment SIP for SO2 was submitted in 1981, not 1989. On line 2, the second one of the inventories that was in the table is incorrectly labeled as 1988 and should be 1990. Staff requests that the motion include these changes. This all went out for public comment on October 1, 2004. As a result of the comments received, staff is proposing changes that appear as underlined or show a strikeout. The public has not had a chance to consider those changes because they are a non substantive and more of a clarification and does not change the meaning. So with those changes, staff asks for a motion to approve the plan with the changes and the two that do not appear that are not underlined or stricken out.

JoAnn Seghini said that the amendment would be included in the motion.

Ernest Wessman called the question.

John Veranth asked the Board if they were in favor and the Board approved unanimously.

V. **Proposal for Final Approval: Natural Events Action Plan (NEAP).** Presented by Dave Strohm

Dave Strohm reported that the Natural Events Action Plan (NEAP) had gone out for a 30-day public comment period after it was presented to the Board in October 2004. Comments were received from EPA and Kennecott Utah Copper and a summarized copy was attached to the packet. Mr. Strohm gave a quick review of the difference between the NEAP and the standard rule making process approved in the SIP provisions. EPA accepts and does not approve the NEAP. In order for the NEAP to be adopted, staff had to show that the best available control measures (BACM) were currently in place. EPA's acceptance of the NEAP allows staff to flag data that is attributed to natural event occurrences that will keep Utah in attainment. EPA also has the requirement for a five-year review on all NEAP's. If there are sufficient events in the future that are flagged as natural events, then that information is resubmitted as an amendment to the NEAP to show that the event is being dealt with.

In answer to John Veranth's question of a significant event, Dave Strohm replied that a significant event would produce an exceedence of the National Ambient Air Quality Standard (NAAQS). Then staff submits a packet for that event showing that it was attributed to a natural event. It will also show if the current NEAP is dealing with that type of natural event or whether there needs to be a change to the NEAP. It won't go through the entire process again, but staff will make any needed modifications.

Rick Sprott reported that the Clean Air Act specifically addresses natural events for PM10. It does not for PM2.5. EPA has yet to come out with their implementation guidance for PM2.5.

Jerry Grover asked about a monitor in Logan.

Dave Strohm replied that there was a monitor in Logan and the general form of the NEAP still applied. The NEAP identifies specific monitors that have experienced problems. Staff does the analysis that shows which sources are impacting a particular monitor and that would change geographically. The monitors that the NEAP is based on run along the Wasatch Front. It starts south at Lindon and ends south of Ogden to the north. If there was an exceedence for PM10 in Logan, then those sources that were impacting the monitor in the meteorological analysis would need to be added and that would be an amendment to that NEAP. If a monitor were moved, EPA would want an analysis of the sources around that monitor in the new location. Staff still has to submit an analysis of the event with meteorological and air quality data that give EPA a reasonable understanding that it is a natural event. A new NEAP does not have to be redeveloped.

Staff answered questions concerning gravel pit dust plumes and wild fires. Neither had impacted the NEAP that was to be submitted. All of the events were shown in the appendixes.

John Veranth mentioned that the NEAP really has two parts. One, to identify the event that is being flagged that would cause an exceedence, and the other is to notify the public.

- Marcelle Shoop made the motion that the Board approve the final Natural Events action plan with the following modifications. The typographical error identified on page 11, "listserv" should be "list serve". On page 28: Table 4, note that it is a summary; line 16, change "weather" to "whether"; Table 4, column one, second row, "Brigham" should be "Bingham".

  Ernest Wessman seconded the motion. The Board approved unanimously.

VI. Propose for Public Comment R307-210-1. Incorporation by Reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Presented by Rusty Ruby

The Division had previously incorporated the New Source Performance Standard (NSPS) by reference into the Utah Administrative Code R307-210. Staff needed to update the rule to the current version of the New Source Performance Standards. Staff is proposing that the Board submit for public comment the modification to R307-210-1 to update the incorporation of reference to include the current NSPS up to July 8, 2004.

- Jerry Grover motioned that the Board approve the proposal to go to public comment on R307-210-1. It was seconded by Wayne Samuleson. The Board approved unanimously.

VII. Appeal Of Sevier Power Company Permit And Appeal Of IPP Unit 3 Permit. Notification Of Further Proceedings. Presented by Fred Nelson

Ernest Wessman recused himself from the discussion because of the interest PacifiCorp has in the matter.

John Veranth stated that early this year, environmental groups asked him to recuse himself from any of the discussions. Since that meeting, there has been no contact with either of these projects.

Fred Nelson stated that in October, the Executive Secretary issued two approval order permits. One to the Sevier Power Company to construct a coal powered plant in Sevier County Utah. The second was issued to the Intermountain Power Service Corporation to construct Unit 3 at their Millard power plant.

Those Approval Orders have been appealed to this Board. The Board is subject to the Administrative Procedures Act of the State and that Act provides that if someone challenges or wants to challenge permits or decisions or approval orders issued by the Executive Secretary, it is submitted to this Board for a request for agency action.

The Board has received, with respect to the Sevier Power Company permit, three requests for agency action. Those petitioning to intervene are: Sierra Club and Grand Canyon Trust, Sevier County Citizens for Clean Air and Water, and PacifiCorp.

For Unit 3 of the Intermountain Power Plant, a request for agency action challenging provisions of the permit were submitted by the Sierra Club and Grand Canyon Trust, Millard County Commission and PacifiCorp.

In addition, the Intermountain Power Service Corporation has a request for agency action with respect to some particular provisions of the permit that was issued to them. Under the Administrative Procedures Act, if a proceeding is initiated, the Executive Secretary and the company or individuals receiving the permit are automatically parties to the proceeding. So with respect to the Sevier Power Company appeal, the Executive Secretary and the Sevier Power Company by rule and statute are parties to the proceeding. For the Intermountain Power Group appeal, similarly the Executive Secretary and Company is party to the proceeding.

Other persons that are interested in the process and would like to participate must file a petition to intervene. To petition to intervene under the statute, parties must demonstrate that they have a legal right or interest in participating in the process. So in any of these kinds of proceedings, the Board will have to make an initial determination whether or not to allow the parties to intervene in the proceedings.

Under the act, the Board is required to set this matter as a process for a formal hearing and the Board becomes the judge, the impartial adjudicative body that will hear those matters. As a result, members of the Board are not to speak about the issues with the parties or individuals. The Board is to hear the evidence as a new process. The Board becomes a secluded group in respect to these issues, so every petitioner has a fair opportunity to the information. The issues and all those present will hear the same information and the Board can then make an impartial decision.

The Board needs to decide initially who can participate in the proceedings and determine whether or not the parties petitioning to intervene have met the requirements of the statute. The March Board meeting would hear the question of whether or not the individuals and organizations can participate.

Mr. Nelson continued to say that he was representing the Air Quality Board as legal counsel. Rick Rathbun and Chris Stephens would represent the Executive Secretary, Rick Sprott.

Rick Rathbun noted that there were other parties present that were represented by counsel or may be represented by individuals and not attorneys. The following were introduced: Shawn Phelan and Joro Walker from the Sierra Club and Grand Canyon Trust; James Kennon, President of the Sevier County Citizens for Clean Air and Water; George Haley and Blaine Rawson representing Intermountain Power; Fred Finlinson for the Sevier Power Project; Martin Banks from Stoel Rives representing PacifiCorp in IPP and Sevier Power.

Mr. Nelson went on the say that there were a couple of things the Board needed to do with the Notice of Further Proceedings. The Board needed to decide the dates to hear the intervention requests and the appointment of a presiding officer. The presiding officer would decide on procedural issues that would come up between Board meetings. The Board could decide later to appoint a hearing officer to hear the matter and then bring a recommendation to the Board, or the Board can hear the entire matter. The Board would still need to read the transcripts and make the decision.

Mr. Nelson said that in the draft, he hadn't requested that the parties meet together and propose a schedule to the Board on how much time they believe it would take to hear this matter.

John Veranth said he would be willing to volunteer his services to be the presiding officer, but did it with some hesitation because it would be time consuming.

January 28 was set to file any responses to the intervention request. February 18 is marked for any replies. All parties are to submit enough copies for all Board members and each of the entities.

Fred Nelson recommended that the Board adopt the Notification of Further Proceedings with a modification that instead of February 11 it would now read Feb 18 for replies to be submitted on the petitions to intervene.

There was a lengthy discussion on rights of intervention.

Fred Nelson listed those petitioning to intervene were PacifiCorp, Millard County Commission, Sierra Club and Grand Canyon Trust. It also gives the Sierra Club and Grand Canyon Trust the opportunity to file something with respect to the PacifiCorp and the Millard County Commission requests.

Fred Nelson replied yes when John Veranth asked if the Board was letting all parties and petitioners submit information to be considered by the Board at the March meeting. At that time, the Board would take each party's request for standing and act on it.

- Dianne Nielson said she would make two separate motions.

I would move that the Board accept the form that is before the Board today for the Notification of Further Proceeding in the matter of the Sevier Power Company Power Plant, Sevier County, Utah, DAQE-AN2529001-04, with the following addition in the first full paragraph on page two, the sentence in the middle of that paragraph beginning with "Any response." The sentence would now read, "Any response," and insert the phrase, "by parties or petitioners as referenced in paragraphs one, two and three of this document," the sentence would proceed to "any intervention request." The next sentence beginning, "any reply would be submitted," the date would be changed from "February 11" to "February 18." On the third page, under the "Presiding Officer," "The Board hereby appoints the Chairman of the Board, John Veranth, to act as the Presiding Officer in the matter of Notification of Further Proceedings."

JoAnn Seghini seconded. The Board approved unanimously.

There was a request to speak from the audience.

James Kennon from the Sevier County Citizens for Clean Air and Water expressed his concerns. One of the requests was on notification and communication. He would like the agenda posted on the web site. Also, he asked that enough time be given to make any responses to the Board.

- Dianne Nielson moved that the Board adopt the form of Notification to Further Proceedings in the matter of Unit 3 of the Intermountain Power Services Corporation, Millard County, Utah, DAQE-AN0327010-04 with the following changes: In the second full paragraph on page two in the sentence beginning with "Any responses," insert the phrase, "by parties or petitioners as referenced in paragraphs one, two, three and four of

this document," the sentence would proceed. Next, the third sentence would read, "Any reply would be submitted by "February 18" rather than "February 11." On page three under the heading, "Presiding Officer," "The Board hereby appoints Chair, John Veranth as the Presiding Officer for the purpose of issues in the Notification of Further Proceedings."

Richard Olson seconded and the Board approved unanimously.

VIII. Informational Items

A. PM10 Maintenance Plan Update: Presented by Bill Reiss and Colleen Delaney. Bill Reiss introduced Colleen Delaney who would review the Rule Revisions.

Bill Reiss informed the Board that this would be a review of the PM10 Maintenance Plan.

Presently there are two distinct nonattainment areas with approved PM10 SIPs, Utah County and Salt Lake County. They were approved in 1991 and have demonstrated attainment from 1993 to 2003. This new plan would pick up where the old one left off. It would demonstrate another 10 years of compliance with the PM10 SIP standards.

Much of the PM10 problem is associated with secondary aerosol formation. The comprehensive plan would include Utah County and Salt Lake County and Ogden City as well.

The process began with a selection of two episodes where staff measured high concentrations of PM10 with strong temperature inversions. The modeling protocol documented concentration of air emissions during the episode. That includes PM10, SO2, NOx, and also covers point sources, area sources and mobile sources. EPA has reviewed and accepted it. This became a template of how staff compiled the remaining inventories. A model was successfully run which completed the validation. Staff can then develop projection year inventories that represent 10 years out.

The PM10 standard has two parts. It has an annual component as well as a 24-hour standard. Since staff has had difficulty showing compliance with the 24-hour standard, the focus would be on that analysis. Staff has now been successful in the process and has some draft model results. Based on those results, staff is optimistic that attainment can be shown for another 10 years. This forms the foundation of any SIP revisions, either a maintenance plan or an attainment SIP. For the legal aspect, staff needs to show that the model analysis will follow the rules and regulations, guarantee air quality for the next ten years, and that the plan could be made enforceable.

The SIPs that are in place right now contain emission limits. The ones now are a very detailed compilation of emissions limits and operating restrictions for a very large number of sources. It is much more difficult to modify a SIP condition than a permit condition. Typically, some sources need to come in from time to time and modify the permit that they have on file; and then staff will reflect minor

modifications to the operation. Over the past 10 years this has led to some apparent inconsistencies between the SIP regulations and the various approval orders. In some cases is has even prevented staff from issuing Title V permits.

With this new plan, staff will develop SIP conditions for significant emissions limits and operating parameters as necessary to ensure attainment of the standards and protection of public health. At the same time, it will allow some flexibility when the sources come in and do request permit changes.

A stakeholder SIP meeting was held in November and constructive comments were received. The next step will be to take the finalization of those SIP conditions and run them to the extent that they agree with the emissions inventories that were projected in the model. At that point, staff will do the modeling analyses, projection year inventories, and do a proposed draft and make it available to EPA.

John Veranth mentioned that the letter contained items that had been committed to EPA to address various issues; one was the Director's discretion. There had been issues over that terminology. The Board needs to be more consistent with EPA's national thinking, and address each of those issues where EPA has objected.

Bill Reiss stated that for the Director's discretion, staff had language that was going to be proposed as Part H into the SIP conditions portion of the plan. It is a paragraph that draws on some existing federal regulations. Staff is hoping that will go a long way to addressing EPA's concern. As far as the variance provisions, the present language basically allows the discretionary use of the Boards good judgment, as long as it is not contrary to the Clean Air Act. Currently there is reform at the Federal NSR on emission banking and interpollutant trading. Also, if staff is successful on redesignating the area, then the terms of the nonattainment NSR program will change to PSD permitting programming. Within that context, the emissions banking will be less significant than it had been. Staff is still working on the emissions rule. Back half emissions would be addressed when the EPA PM2.5 implementation guidance is developed. In order to get credit for the wood-burning program, staff would need to show that it is better than what EPA says it is.

Colleen Delaney talked about rules and changes that needed to be considered with the maintenance plan. The two groups are backsliding and the permitting program.

Back Sliding: There have been a number of control strategies that have been applied and worked in the PM10 nonattainment areas. These would be things like the wood burning control program, fugitive dust requirements, opacity limits, and road salting and sanding that have helped the area stay in attainment. There are 11 recommended changes that are being proposed that will need to continue in the new maintenance areas.

Permitting Program: Upon the Boards request with the 5-year rule review, staff has looked at the rules and recommends a number of changes that will update and clarify them. They have been placed into a series of rules. The 200 series would be a requirement that applies statewide. This group of rules applies to rural areas that have always been in attainment. This group would be removed from the SIP and would not be part of the federally approved state implementation plan, but would fall under state rules only.

Another 200 series group would apply to new attainment areas. As these areas are redesignated, staff wants to make sure the program continues. One concern is the wintertime temperature inversion that forms particulate matter from secondary sulfates and nitrates. Under the PSD permitting program, the air quality models do not have the capability at this time to quantify the impacts of secondary pollutants in the PM10 model. Staff suggests retaining the offset provisions currently in place in the nonattainment areas for SO2 and NOx as a backup mechanism to complement the modeling that is done under the PSD program. This was the approach that was used in the ozone nonattainment areas. Staff kept in place a state only rule for offset requirements for NOx and VOC's. Currently there are no permitting models that could be used in order to make the day-to-day permitting decisions. Once an area is redesignated attainment, it will take some time for the Board to approve the SIP. Also, the PSD permitting program will become effective for PM10 and SO2 when that maintenance plan is approved. There will be a stakeholders meeting February 1 to discuss this with affected parties.

Ms. Delaney continued by saying the 300 series applies specifically to nonattainment areas for particular pollutants.

Finally, there is the question on how can staff use the permitting process, perhaps using the Title V process, to make sure there are certain kinds of changes made to some of the SIP conditions dealing with the Director's discretion issue.

Jerry Grover asked about the diesel program and credits.

Bill Reiss explained that the diesel program had been built and calculated into the model. After a discussion with EPA, it was on the table for the moment.

Rick Sprott stated that Utah was getting some credit and credit was needed to demonstrate attainment.

The Board meeting was adjourned at 3:50 pm.

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ETHICS AND DISCLOSURE

UTAH

PM10 Maintenance Provisions for Salt Lake and Utah Counties and Ogden City

Section IX.A.10

Adopted by the Air Quality Board
June 1, 2005

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Section IX.A.10
PM10 Maintenance Provisions

IX.A.10.a Introduction

The foregoing Subsections 1-9 of Part IX.A of the Utah State Implementation Plans (SIP) were written in 1991 to address violations of the National Ambient Air Quality Standards (NAAQS) for PM_{10} in both Utah County and Salt Lake County. These areas were each classified as Initial Moderate PM_{10} Nonattainment Areas, and as such required "nonattainment SIPs" to bring them into compliance with the NAAQS by a statutory attainment date. The control measures adopted as part of those plans have proven successful in that regard, and at the time of this writing (2005) each of these areas has a substantial record of continued compliance with the federal health standards for PM_{10}.

This Subsection 10 of Part IX.A of the Utah SIP represents the second chapter of the PM_{10} story, and demonstrates that Utah's nonattainment areas have achieved compliance with the PM_{10} NAAQS and will continue to maintain that standard through the year 2017. As such, it is written in accordance with Section 175A (42 U.S.C. 7505a) of the Act, and should serve to satisfy the requirement of Section 107(d)(3)(E)(iv), should Utah pursue the option of petitioning the EPA to ultimately redesignate any of its current nonattainment areas.

This section is hereafter referred to as the "Maintenance Plan" or "the Plan," and contains the maintenance provisions of the PM_{10} SIP for Utah County and Salt Lake County. Also included are the maintenance provisions for Ogden City. This third area was effectively designated to nonattainment for PM_{10} on September 26, 1995.

While the Maintenance Plan could be written to replace all that had come before, it is presented herein as an addendum to Subsections 1-9 in the interest of providing the reader with some sense of historical perspective.

In a similar way, any references to the Technical Support Document (TSD) in this section means actually Supplement III-05 to the Technical Support Document for the PM_{10} SIP.

Background

The federal Clean Air Act requires areas failing to meet the federal ambient PM_{10} standard to develop SIP revisions with sufficient control requirements to expeditiously attain and maintain the standard. On July 1, 1987, EPA promulgated a new NAAQS for particulate matter with a diameter of 10 microns or less (PM_{10}), and listed Salt Lake and Utah Counties as Group I areas for PM_{10}. This designation was based on historical data for the previous standard, total suspended particulate, and meant that there was a 95% probability that Group I areas would exceed the new PM_{10} standard. Group I area SIPs were due in April 1988, but Utah was unable to complete the SIP by that date. In 1989, several citizens groups sued EPA (*Preservation Counsel v. Reilly*, civil Action (No. 89-C262-G (D, Utah)) for failure to implement a Federal Implementation Plan (FIP) under provisions of §110(c)(1) of the Clean Air Act (42 U.S.C. 7410(c)(1)). A settlement agreement in January 1990 called for Utah to submit a SIP and for EPA to approve it by December 31, 1991. In August 1991, the parties voluntarily agreed to dismiss the lawsuit and the complaint and vacate the settlement agreement.

The Clean Air Act Amendments of November 1990 redesignated Group I areas as initial moderate nonattainment areas and required submittal by November 15, 1991, of a SIP requiring installation of Reasonably Available Control Measures (RACM) on industrial sources affecting the nonattainment areas by December 10, 1993. It required that states demonstrate attainment of the standard not later than December 31, 1994.

(1) The PM_{10} SIP

On November 14, 1991, Utah submitted a SIP for Salt Lake and Utah Counties that demonstrated attainment of the PM_{10} standards in Salt Lake and Utah Counties for 10 years, 1993 through 2003. EPA published approval of the SIP on July 8, 1994 (59 FR 35036).

(2) Supplemental History of SIP Approval - PM_{10}

Utah's SIP included two provisions that promised additional action by the state: 1) a road salting and sanding program, and 2) a diesel vehicle emissions inspection and maintenance program.

On February 3, 1995, Utah submittal amendments to the SIP to specify the details of the road salting and sanding program promised as a control measure. EPA published approval of the road salting and sanding provisions on December 6, 1999 (64 FR 68031).

On February 6, 1996, Utah submitted to EPA a new SIP Section XXI, a diesel vehicle inspection and maintenance program. EPA has not acted on that submittal.

Also, in April 1992, EPA published the "General Preamble," describing EPA's views on reviewing state SIP submittals. One of the requirements was that moderate nonattainment area states must submit contingency plans by November 15, 1993.

On July 31, 1994, Utah submitted an amendment to the PM_{10} SIP that required lowering the threshold for calling no-burn days as a contingency measure for Salt Lake, Davis and Utah Counties. On July 17, 1995, Utah added another contingency measure for Utah County, requiring that Utah County implement an enhanced vehicle emissions inspection and maintenance program or an equivalent program to reduce emissions of nitrogen oxide by January 1, 1995.

On July 18, 1997, EPA promulgated a new form of the PM_{10} standard. As a way to simplify EPA's process of revoking the old PM_{10} standard, EPA requested on April 6, 1998, that Utah withdraw its submittals of contingency measures. Utah submitted a letter requesting withdrawal on November 9, 1998, and EPA returned the submittals on January 29, 1999.

(3) Attainment of the PM_{10} Standard and Reasonable Further Progress

By statute, Initial Moderate Areas had to show they were attaining the standard by December 31, 1994. This showing required examining the last three years of monitoring data (in this case 1992, 1993 and 1994). The 24-hour NAAQS allows no more than three expected exceedances of the 24-hour standard at any monitor in this 3-year period. Since the statutory deadline for the implementation of RACM was not until the end of 1993, it was reasonable to presume that the area might not be able to show attainment with a 3-year data set until the end of 1996 even if the control measures were having the desired effect. For this reason, the Clean Air Act §188(d), (42 U.S.C. 7513(d)) allows a state to request up to two 1-year extensions of the attainment date. In doing so, the state must show that it has met all requirements of the SIP, that no more than one

exceedance of the 24-hour PM_{10} NAAQS has been observed in the year prior to the request, and that the annual mean concentration for such year is less than or equal to the annual standard.

EPA's Office of Air Quality Planning and Standards issued a guidance memorandum concerning extension requests (November 14, 1994), clarifying that the authority delegated to the Administrator to extend attainment dates for moderate areas is discretionary. In exercising this discretionary authority, it says, EPA will examine the air quality planning progress made in the area, and in addition to the two criteria specified in Section 188(d), EPA will be disinclined to grant an attainment date extension unless a state has, in substantial part, addressed its moderate PM_{10} planning obligations for the area. The EPA will expect the State to have adopted and substantially implemented control measures submitted to address the requirement for implementing RACM/RACT in the moderate nonattainment area, as this was the central control requirement applicable to such areas. Furthermore it said, "EPA believes this request is appropriate, as it provides a reliable indication that any improvement in air quality evidenced by a low number of exceedances reflects the application of permanent steps to improve the air quality in the region, rather than temporary economic or meteorological changes." As part of this showing, EPA expected the State to demonstrate that the PM_{10} nonattainment area has made emission reductions amounting to reasonable further progress (RFP) toward attainment of the NAAQS, as defined in Section 171(1) of the Act.

On May 11, 1995, Utah requested one-year extensions of the attainment date for both Salt Lake and Utah Counties. On October 18, 1995, EPA sent a letter granting the requests for extensions, and on January 25, 1996, sent a letter indicating that EPA would publish a rulemaking action on the extension requests. However, no rulemaking was published, nor was a notice published that the areas had not reached attainment by December 31, 1994. On March 27, 1996, Utah requested a second one-year extension for Utah County; no rulemaking was published to grant that extension, nor was a notice published stating that Utah County had not reached attainment by December 31, 1995.

Along with the extension requests in 1995, Utah submitted a milestone report as required under CAA §172(1), (42 U.S.C. 7501(1)) to assess progress toward attainment. This milestone report addressed two issues: 1) that all control measures in the approved plan had been implemented, and 2) that reasonable further progress (RFP) had been made toward attainment of the standard in terms of reducing emissions. As defined in Section 171(1), RFP means such annual incremental reductions in emissions of the relevant air pollutant as are required to ensure attainment of the applicable NAAQS by the applicable date.

On June 18, 2001, EPA published notice in the Federal Register (66 FR 32752) that Utah's extension requests were granted, that Salt Lake County attained the PM_{10} standard by December 31, 1995, and that Utah County attained the standard by December 31, 1996. The notice stated that these areas remain moderate nonattainment areas and are not subject to the additional requirements of serious nonattainment areas.

(4) Ogden City

As mentioned above, Ogden City was designated from unclassifiable to nonattainment on September 26, 1995. This was due to a total of six exceedances of the 24-hour standard recorded between January 1991 and January 1993. Along with redesignation came the requirement for a nonattainment SIP, due in 18 months, and an attainment date of December 31, 2001.

However, in 1997 a new standard for PM_{10} was promulgated by the EPA, and, based on the revised form of this new standard, Ogden City would never have been found to be in noncompliance.

In an effort to transition to the new form of the PM10 standard, EPA issued its Interim Implementation Guidance (IIG) on December 23, 1997. This, in conjunction with additional guidance (5/8/98 memorandum from Sally L, Shaver to all Regional Air Directors) identified two steps necessary to revoke the old standard for areas like Ogden City that were presently (as of September 16, 1997) attaining the standard. The State would need to: 1) codify into its SIP any existing controls that were implemented at the state level, and 2) demonstrate the state's capacity to implement the revised PM_{10} standards with respect to the Clean Air Act (CAA) requirements found at Section 110.

By letter of March 27, 1998, Utah declared it could meet the second of these requirements for all areas of the state. A second letter (June 25, 1998) addressed the first requirement, and requested that the old PM_{10} standard be revoked and that the outstanding Part D requirement be waived for Ogden City.

EPA responded in a letter dated August 12, 1999 that the rationale for revoking the old standard would no longer apply because the United States D.C. Circuit Court of Appeals had, on May 14, 1999, vacated the 1997 PM_{10} NAAQS. This meant that Utah's obligation to satisfy the Part D requirements with respect to the pre-1997 NAAQS was still outstanding.

In the wake of the ruling by the D.C. Circuit, EPA (on October 18, 1999) made available its PM_{10} Clean Data Areas Approach, providing areas like Ogden City with another avenue by which to satisfy any outstanding Part D requirements. This applied EPA's clean data policy concept for ozone to selected PM_{10} nonattainment areas with simple PM_{10} source problems such as residential wood combustion and fugitive dust. The area would have to: 1) be attaining the NAAQS with the three most recent years of quality assured air quality data, 2) continue to operate an appropriate PM_{10} monitoring network in order to verify the attainment status of the area, and 3) the control measures responsible for bringing the area into attainment must be approved by EPA. EPA would also need to find that the area had adopted RACM/RACT, and make a finding that the area attained the 24-hour and annual PM_{10} NAAQS. Should these criteria be met, the area would no longer have to meet the criteria for developing RFP demonstrations, and contingency measures would be waived. Also any sanction clocks that may have been running would be stopped.

Utah addressed these criteria for Ogden City in a letter dated March 30, 2000. In particular, it identified a number of control measures that applied to nonattainment areas in general and were at least partly responsible for bringing the area into compliance with the PM_{10} NAAQS. Since these measures (open burning rule, visible emissions rule, fugitive dust rule, and vehicle I/M) were incorporated into the Utah SIP, and since the IIG had indicated that it would be inappropriate to require any new control measures, it could be concluded that the Part D planning requirements for Ogden City had been satisfied. The March 30, 2000, letter cited agreement between the respective agencies on these three criteria, and accordingly petitioned EPA to note in the Federal Register that the Part D planning requirements for Ogden City had in fact been satisfied. It also acknowledged that such action would not constitute a redesignation under CAA Section 107, and that if the State wished to request that Ogden City be redesignated to attainment, then subsequent action must be taken under CAA Section 175[A].

Also acknowledged was the obligation to produce a basic emissions inventory for Ogden City to the satisfaction of EPA Region VIII. After a period of public review and comment, the inventory was transmitted to EPA on August 9, 2001. The State identified this inventory as the only

remaining element among the criteria outlined in the PM_{10} Clean Data Areas Approach, and again requested that EPA find in the Federal Register that Utah had fulfilled its planning requirements for Ogden City, under Part D of the CAA.

Utah had been collecting ambient PM_{10} data at the Ogden site (AIRS # 49-057-0001) since April of 1987, and had no intentions of discontinuing data collection at that site. However, in February of 2000 the structure on which the monitor was situated was demolished, and it was not until July 1, 2001 that collection could resume at a new location (AIRS # 49-057-0002). Unfortunately, this meant that EPA could take no action. Although Utah was again meeting the second criteria of the PM_{10} Clean Data Areas Approach (to continue monitoring), the first criterion was now called into question. Although the data collected from 1994 through February of 2000 showed continued compliance with the NAAQS, Utah did not have data for the three most recent years.

This was addressed in a letter to EPA dated November 6, 2001. Attached to that letter was an analysis intended to provide both EPA and the public that the ambient air within Ogden City had remained within the standards set for public health. This quantitative analysis, based on a surrogate monitor, concluded that the likelihood of having violated the PM_{10} NAAQS in Ogden City during that time was less than one in 1,500. It was suggested that EPA could use this information to help conclude that Ogden City was attaining the PM_{10} NAAQS as of its statutory attainment date (December 31, 2001), and was attaining the PM_{10} NAAQS to the extent that it would remain eligible for the PM_{10} Clean Data Areas Approach.

As of the date of this writing (2005), Utah has collected three full calendar years of ambient data at the new Ogden site (2002, '03, and '04). Based on this 3-year data set, Ogden City is attaining the PM_{10} NAAQS. Utah has once again (by letter of February 15, 2005) petitioned EPA to find in the Federal Register that it has satisfied its planning obligation under Part D of the CAA for Ogden City.

IX.A.10.b Pre-requisites to Area Redesignation

The Clean Air Act §107(d)(3)(E) outlines five requirements that must be satisfied in order that a state may petition the Administrator to redesignate a nonattainment area back to attainment. These requirements are summarized as follows: 1) the Administrator determines that the area has attained the applicable NAAQS, 2) the Administrator has fully approved the applicable implementation plan for the area under §110(k), 3) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan … and other permanent and enforceable reductions, 4) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of §175A, and 5) the State containing such area has met all requirements applicable to the area under §110 and Part D.

Each of these requirements will be addressed below. Certainly, the central element from this list is the maintenance plan found at Subsection IX.A.10.c below. Section 175A of the Act contains the necessary requirements of a maintenance plan, and EPA policy based on the Act requires additional elements in order that such plan be federally approvable. Table IX.A.29 identifies the prerequisites that must be fulfilled before a nonattainment area may be redesignated to attainment under Section 107(d)(3)(E).

Table IX.A.29 Prerequisites to Redesignation			
Category	**Requirement**	**Reference**	**Addressed in Section**
Attainment of Standard	Three consecutive years of PM10 monitoring data must show that violations of the standard are no longer occurring.	CAA §107(d)(3)(E)(i)	IX.A.10.b(1)
Approved State Implementation Plan	The SIP for the area must be fully approved.	CAA §107(d)(3)(E)(ii)	IX.A.10.b(2)
Permanent and Enforceable Emissions Reductions	The State must be able to reasonably attribute the improvement in air quality to emission reductions that are permanent and enforceable	CAA §107(d)(3)(E)(iii), Calcagni memo (Sect 3, para 2)	IX.A.10.b(3)
Section 110 and Part D requirements	The State must verify that the area has met all requirements applicable to the area under section 110 and Part D.	CAA: §107(d)(3)(E)(v), §110(a)(2), Sec 171	IX.A.10.b(4)
Maintenance Plan	The Administrator has fully approved the Maintenance Plan for the area as meeting the requirements of CAA §175A	CAA: §107(d)(3)(E)(iv)	IX.A.10.b(5) and IX.A.10.c

(1) The Area Has Attained the PM_{10} NAAQS

CAA 107(d)(3)(E)(i) - *The Administrator determines that the area has attained the national ambient air quality standard.* To satisfy this requirement, the State must show that the area is attaining the applicable NAAQS. According to EPA's guidance concerning area redesignations (Procedures for Processing Requests to Redesignate Areas to Attainment, John Calcagni to Regional Air Directors, September 4, 1992 [or, Calcagni]), there are generally two components involved in making this demonstration. The first relies upon ambient air quality data which should be representative of the area of highest concentration and should be collected and quality assured in accordance with 40 CFR 58. The second component relies upon supplemental air quality modeling. Each will be discussed in turn.

(a) Ambient Air Quality Data (Monitoring)

In 1987 EPA promulgated the National Ambient Air Quality Standard (NAAQS) for PM_{10}. The NAAQS for PM_{10} is listed in 40 CFR 50.6 along with the criteria for attaining the standard. The 24-hour NAAQS is 150 micrograms per cubic meter (ug/m^3) for a 24-hour period, measured from midnight to midnight. The 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 ug/m^3, as determined in accordance with Appendix K to that part, is equal to or less than one. In other words, each monitoring site is allowed up to three expected exceedances of the 24-hour standard within a period of three calendar years. More than three expected exceedances in that three-year period is a violation of the NAAQS. There is also an annual standard of 50 ug/m^3. The annual standard is attained if the three-year average of individual annual averages is less than 50 ug/m^3. Three consecutive years of PM_{10} monitoring data must show that violations of the 24-hour and annual standard are no longer occurring in order for an area to be considered to be attaining the NAAQS.

40 CFR 58 Appendix K, Interpretation of the National Ambient Air Quality Standards for Particulate Matter, acknowledges the uncertainty inherent in measuring ambient PM_{10}

concentrations by specifying that an *observed exceedance* of the (150 ug/m^3) 24-hour health standard means a daily value that is above the level of the 24-hour standard after rounding to the nearest 10 ug/m^3 (e.g., values ending in 5 or greater are to be rounded up).

The term *expected exceedance* accounts for the possibility of missing data. Missing data can occur when a monitor is being repaired, calibrated, or is malfunctioning, leaving a time gap in the monitored readings. EPA discounts these gaps if the highest recorded PM_{10} reading at the affected monitor on the day before or after the gap is not more than 75 percent of the standard, and no measured exceedance has occurred during the year.

Expected exceedances are calculated from the Aerometric Information and Retrieval System (AIRS) data base according to procedures contained in 40 CFR Part 50, Appendix K. The State relied on the expected exceedance values contained in the AIRS Quick Look Report (AMP 450) to determine if a violation of the standard had occurred. Any data which had been flagged as inappropriate for use in making such determinations, whether concurred with by EPA or not, was not considered here.

Using this criteria, data was compiled for all PM_{10} monitors within the three nonattainment areas that recorded a three-year data set comprising the years 2002, 2003 and 2004. For each monitor, the number of expected exceedances is reported for each year, and then the average number of expected exceedances is reported for the three-year period. If this average number of expected exceedances is less than or equal to 1.0, then that particular monitor is said to be in compliance with the 24-hour standard for PM_{10}. In order for an area to be in compliance with the NAAQS, every monitor within that area must be in compliance.

In a similar way, the annual arithmetic mean concentrations of PM_{10} are reported for each year, and then averaged to produce the result that is compared with the annual PM_{10} standard of 50 ug/m^3.

As illustrated in the tables below, the results of this exercise show that each of the three PM_{10} nonattainment areas is presently attaining the NAAQS.

Table IX.A.30 PM10 Compliance in Salt Lake County, 2002-2004

Cottonwood 49-035-0003	24-hour Standard	Annual Standard
	No. Expected Exceedences	Annual Arithmatic Mean
2002	0.0	31.9
2003	0.0	28.3
2004	0.0	31.5
3-Year Average	**0.0**	**30.6**

North Salt Lake 49-035-0012	24-hour Standard	Annual Standard
	No. Expected Exceedences	Annual Arithmatic Mean
2002	0.0	41.4
2003	0.0	37.6
2004	0.0	41.7
3-Year Average	**0.0**	**40.2**

Magna 49-035-1001	24-hour Standard	Annual Standard
	No. Expected Exceedences	Annual Arithmatic Mean
2002	0.0	25.0
2003	0.0	22.7
2004	0.0	23.9
3-Year Average	**0.0**	**23.9**

Hawthorne 49-035-3006	24-hour Standard	Annual Standard
	No. Expected Exceedences	Annual Arithmatic Mean
2002	0.0	28.9
2003	0.0	25.9
2004	0.0	29.1
3-Year Average	**0.0**	**28.0**

Additional information presented in Subsection IX.A10.b(3) shows that the Salt Lake County PM_{10} nonattainment area has not exceeded the 24-hour standard since 1992. It actually attained the standard as of December 31, 1995, and has remained in compliance with the PM_{10} NAAQS through 2004.

Table IX.A.31 PM10 Compliance in Utah County, 2002-2004

North Provo 49-049-0002	24-hour Standard	Annual Standard
	No. Expected Exceedences	Annual Arithmatic Mean
2002	0.0	28.6
2003	0.0	23.0
2004	0.0	24.6
3-Year Average	**0.0**	**25.4**

Lindon 49-049-4001	24-hour Standard	Annual Standard
	No. Expected Exceedences	Annual Arithmatic Mean
2002	0.0	31.7
2003	0.0	24.7
2004	0.0	28.5
3-Year Average	**0.0**	**28.3**

Additional information presented in Subsection IX.A.10.b(3) shows that the Utah County PM_{10} nonattainment area has not exceeded the 24-hour standard since 1993. It actually attained the standard as of December 31, 1996, and has remained in compliance with the PM_{10} NAAQS through 2004. The annual standard was never violated.

Table IX.A.32 PM10 Compliance in Ogden, 2002-2004

Ogden2 49-057-0001	24-hour Standard	Annual Standard
	No. Expected Exceedences	Annual Arithmatic Mean
2002	0.0	34.4
2003	0.0	28.0
2004	0.0	27.9
3-Year Average	**0.0**	**30.1**

Additional information presented in Subsection IX.A.10.b(3) shows that the Ogden City PM_{10} nonattainment area has not exceeded the 24-hour standard since 1993. It actually attained the standard as of December 31, 1996, and has remained in compliance with the PM_{10} NAAQS through 2004. The annual standard was never violated.

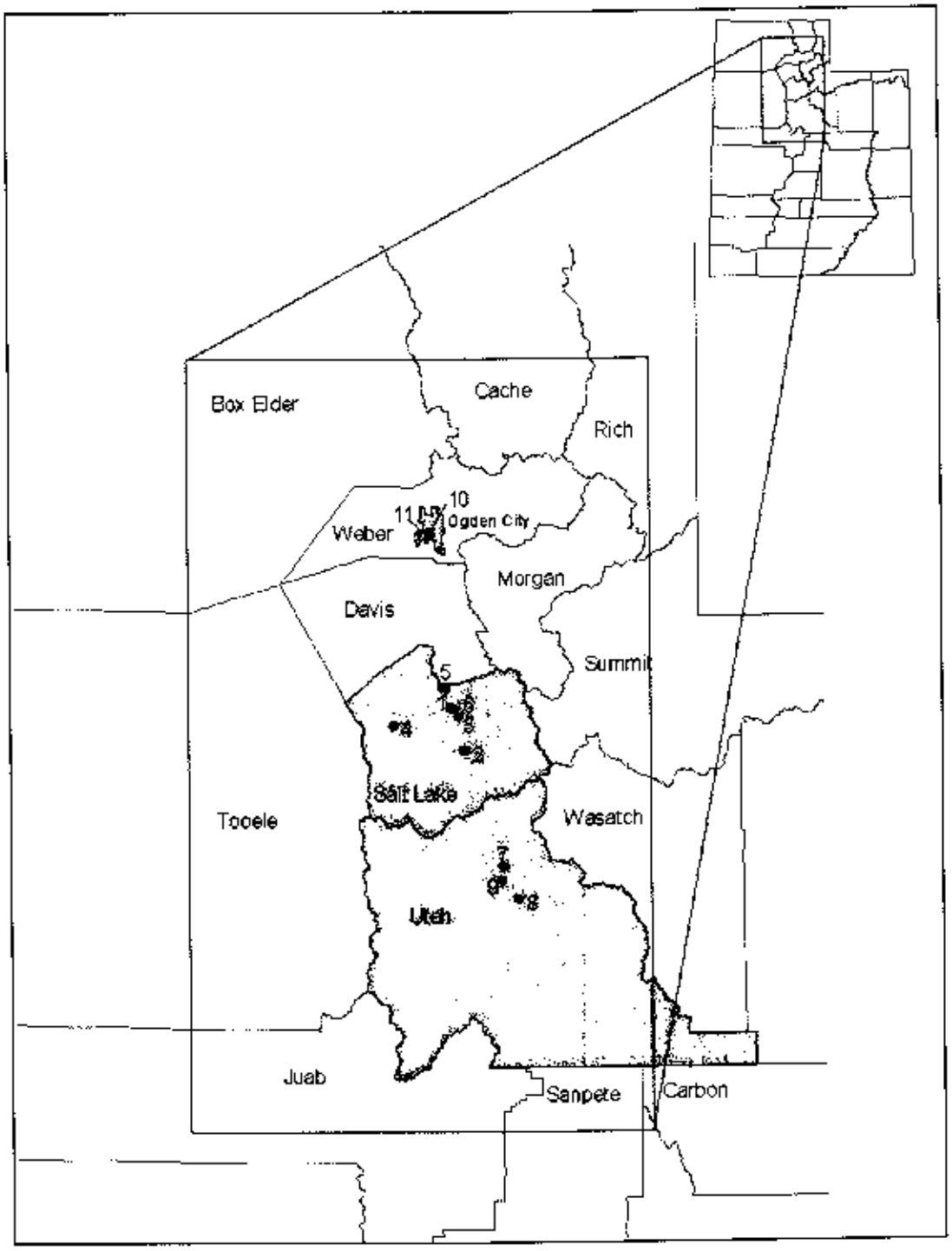
(b) PM10 Monitoring Network

The overall assessments made in the preceding paragraph were based on data collected at monitoring stations located throughout the nonattainment areas. The Utah DAQ maintains a network of PM_{10} monitoring stations in accordance with 40 CFR 58. These stations are referred to as SLAMS sites, meaning that they are State and Local Air Monitoring Stations. In consultation with EPA, an Annual Monitoring Network Review is developed to address the adequacy of the monitoring network for all criteria pollutants. Within the network, individual stations may be situated so as to monitor large sources of PM_{10}, capture the highest concentrations in the area, represent residential areas, or assess regional concentrations of PM_{10}.

Collectively, these monitors make up Utah's PM_{10} monitoring network. The following paragraphs describe the network in each of Utah's three nonattainment areas for PM_{10}.

Provided in Figure IX.A.23 is a map of the modeling domain that shows the existing PM_{10} nonattainment areas and the locations of the monitors therein. Some of the monitors at these locations are no longer operational, but they have been included for informational purposes.

Figure IX.A.23 Modeling Domain



The following PM_{10} monitoring stations operated in the Salt Lake County PM_{10} nonattainment area from 1985 through 2004. They are numbered as they appear on the map:

1. Air Monitoring Center (AMC) (AIRS number 49-035-0010): This site was located in an urban city center, near an area of high vehicle use. It was closed in 1999 when DAQ lost its lease on the building.
2. Cottonwood (AIRS number 49-035-0003): This site is located in a suburban residential area. It has been collecting data since 1986.
3. Hawthorne (AIRS number 49-035-3006): This site is located in a suburban residential area. It began collecting data in 1997.
4. Magna (AIRS number 49-035-1001): This site is located in a suburban residential area. It is largely impacted (at times) by blowing dust from a large tailings impoundment, and as such is anomalous with respect to the typical wintertime scenario that otherwise characterizes the nonattainment area. It has been collecting data since 1987.
5. North Salt Lake (AIRS number 49-035-0012): This site is located in an industrial area that is impacted by sand and gravel operations, freeway traffic, and several refineries. It is situated near a residential area as well. It has been collecting data since 1985.
6. Salt Lake City (AIRS number 49-035-3001): This site was situated in an urban city center. It was discontinued in 1994 because of modifications that were made to the air conditioning on the roof-top.

The following PM_{10} monitoring stations operated in the Utah County PM_{10} nonattainment area from 1985 through 2004. They are numbered as they appear on the map:

7. Lindon (AIRS number 49-049-4001): This site is designed to measure population exposure to PM_{10}. It is located in a suburban residential area affected by both industrial and vehicle emissions. PM_{10} has been measured at this site since 1985, and the readings taken here have consistently been the highest in Utah County. Area source emissions, primarily wood smoke, also affects the site.
8. North Provo (AIRS number 49-049-0002): This is a neighborhood site in a mixed residential-commercial area in Provo, Utah. It began collecting data in 1986.
9. West Orem (AIRS number 49-049-5001): This site is located in a residential area adjacent to a large steel mill. It is a neighborhood site. It was situated based on computer modeling, and has historically reported high PM_{10} values, but not consistently as high as those observed at the Lindon site. The site was closed at the end of 1997 for this reason.

The following PM_{10} monitoring stations operated in the Ogden City PM_{10} nonattainment area from 1986 through 2004. They are numbered as they appear on the map:

10. Ogden 1 (AIRS number 49-057-0001): This site was situated in an urban city center. It was discontinued in 2000 because DAQ lost its lease on the building.
11. Ogden 2 (AIRS number 49-057-0002): This site began collecting data in 2001, as a replacement for the Ogden 1 location. It too is situated in an urban city center.

(c) Modeling Element

EPA guidance concerning redesignation requests and maintenance plans (Calcagni) discusses the requirement that the area has attained the standard, and notes that air quality modeling may be necessary to determine the representativeness of the monitored data.

Information concerning PM_{10} monitoring in Utah is included in the Annual Monitoring Network Review. Since the early 1980's, the network review has been updated annually and submitted to

EPA for approval. EPA has concurred with the annual network reviews and agreed that the network is adequate. EPA personnel have also visited the monitor sites on several occasions to verify compliance with federal siting requirements.

The Calcagni memo goes on to say that areas that were designated nonattainment based on modeling will generally not be redesignated to attainment unless an acceptable modeling analysis indicates attainment.

Though none of Utah's three PM_{10} nonattainment areas was designated based on modeling, it is still worth pointing out that an air quality modeling analysis was conducted for the purpose of this maintenance demonstration. It shows that all three nonattainment areas will continue to comply with the PM_{10} NAAQS through the year 2017.

(d) EPA Acknowledgement

The data presented in the preceding paragraphs show quite clearly that each of Utah's three PM_{10} nonattainment areas has attained the NAAQS. As discussed before, the EPA acknowledged as much in the Federal Register for both Utah County and Salt Lake County.

On June 18, 2001, EPA published notice in the Federal Register (66 FR 32752) that Utah's extension requests were granted, that Salt Lake County attained the PM_{10} standard by December 31, 1995, and that Utah County attained the standard by December 31, 1996. The notice stated that these areas remain moderate nonattainment areas and are not subject to the additional requirements of serious nonattainment areas.

A similar acknowledgement was to have been made for Ogden City by June 30, 2002.

(2) Fully Approved Attainment Plan for PM_{10}

CAA 107(d)(3)(E)(ii) - *The Administrator has fully approved the applicable implementation plan for the area under section 110(k).*

On November 14, 1991, Utah submitted a SIP for Salt Lake and Utah Counties that demonstrated attainment for Salt Lake and Utah Counties for 10 years, 1993 through 2003. EPA published approval of the SIP on July 8, 1994 (59 FR 35036).

On July 3, 2002, Utah submitted a PM_{10} SIP revision for Utah County. It revised the existing attainment demonstration in the approved PM_{10} SIP based on a short-term emissions inventory, established 24-hour emission limits for the major stationary sources in the Utah County nonattainment area, and established motor vehicle emission budgets based on EPA's most recent mobile source emissions model, MOBILE6. It demonstrated attainment in the Utah County nonattainment area through 2003. The revised attainment demonstration extended through the year 2003. EPA published approval of this SIP revision on December 23, 2002 (67 FR 78181). It became effective on January 22, 2003.

As discussed in the IX.A.10.a(1)(iv) above, there is no approved SIP for Ogden City. Nevertheless, at the time of this writing, it is anticipated that the planning requirements under Part D of the CAA will be found by EPA to have been satisfied via its PM_{10} Clean Data Areas Approach (October 18, 1999).

(3) Improvements in Air Quality Due to Reductions in Emissions

CAA 107(d)(3)(E)(iii) - *The Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan and applicable Federal air pollutant control regulations and other permanent and enforceable reductions.* Speaking further on the issue, EPA guidance (Calcagni) reads that the State must be able to reasonably attribute the improvement in air quality to emission reductions which are permanent and enforceable. In the following sections, both the improvement in air quality and the emission reductions themselves will be discussed.

(a) Improvement in Air Quality

The improvement in air quality with respect to PM_{10} can be shown in a number of ways. Improvement, in this case, is relative to the various control strategies that affected the airshed.

For both the Salt Lake and Utah County nonattainment areas, these control measures were implemented as the result of the nonattainment PM_{10} SIPs promulgated in 1991. As discussed below, the actual implementation of the control strategies required therein first exhibits itself in the observable data in 1994. The ambient air quality data presented below includes values prior to 1994 in order to give a representation of the air quality prior to the application of any control measures. It then includes data collected from then until the present time to illustrate the effect of these controls. In considering the data presented below, it is important to keep this distinction in mind: data through 1993 represents pre-SIP conditions, and data collected from 1994 through the present represents post-SIP conditions.

In the case of Ogden City, there were a number of control measures incorporated into the Utah SIP on either a state-wide basis or as applicable to nonattainment areas in general. As discussed in Subsection IX.A.10.a(1) above, these measures were at least partly responsible for bringing the area into compliance with the PM_{10} NAAQS. The introduction of these measures (open burning rule, visible emissions rule, fugitive dust rule, and vehicle I/M)was not so abrupt as was the case in the other two nonattainment areas, but Vehicle I/M did begin in 1990 which is relatively coincident with the peak of measured concentrations for the area. Its effectiveness is seen in all subsequent years. It is also worth noting that Ogden City implemented a voluntary woodburning control program beginning late in 1992 when the other PM_{10} nonattainment areas implemented mandatory woodburning controls.

Referring back to the discussion of the PM_{10} NAAQS in Subsection IX.A.10.b(1), it is apparent that the number of expected exceedances of the 24-hour standard is an important indicator. As such, this information has been tabulated for each of the monitors located in each of the nonattainment areas. The data in Table IX.A.33 below reveals a marked decline in the number of these expected exceedances. This decline is especially revealing in light of the significant growth experienced during this same period in time.

Also indicative of improvement in air quality with respect to the 24-hour standard, is the magnitude of the excessive concentrations that are observed. This is illustrated, for each nonattainment area, in charts showing the three highest 24-hour concentrations observed in a particular year. (Salt Lake County data is in Figures IX.A.24-27, Utah County data is in Figures IX.A.32-34, and Ogden data is in Figure IX.A.38.) Again there is a noticeable improvement in the magnitude of these concentrations. It must be kept in mind, however, that some of these concentrations may have resulted from windblown dust events that occur outside of the typical scenario of wintertime air stagnation. As such, any control measures directed at the precursors to PM_{10} would not be evident.

In considering the annual PM_{10} standard, the value of the annual arithmetic mean is clearly the most significant parameter to consider. Annual arithmetic means have been plotted for each of the nonattainment areas. (Salt Lake County data is in Figures IX.A.28-31, Utah County data is in Figures IX.A.35-37, and Ogden data is in Figure 39.)

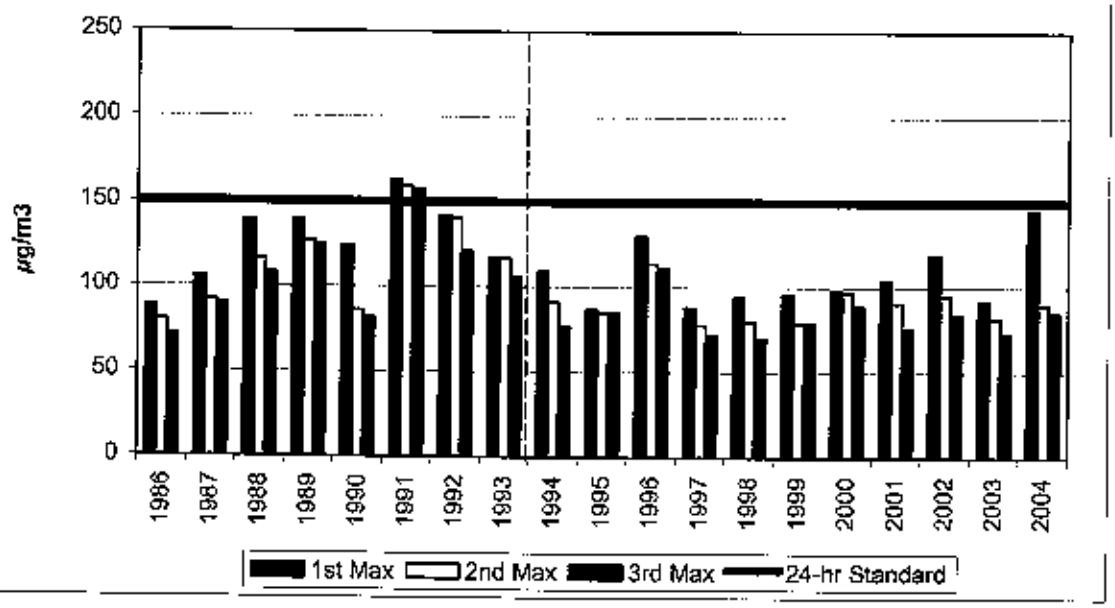
The annual data reveals a noticeable decline in the values of these annual means. This is especially significant in light of one of the assumptions made in the original nonattainment SIPs for Salt Lake and Utah Counties. Based on EPA guidance which states that "The SIP related emission limits should be based on the NAAQS (annual or 24-hour) which result in the most stringent control requirements" these SIPs were developed to address the 24-hour standard for PM_{10}. It was assumed then, that by controlling for the wintertime 24-hour standard, the annual arithmetic mean concentrations would also be reduced such that the annual standard would be protected. The data collected between then and now supports the validity of that assumption.

As illustrated in Tables IX.A.33-35 below, the results of this exercise show that each of the three PM_{10} nonattainment areas has experienced significant improvements in air quality with respect to PM_{10}. The gray cells indicate that the monitor was not in operation.

Table IX.A.33 Salt Lake County Expected Exceedances per Year, 1985-2004

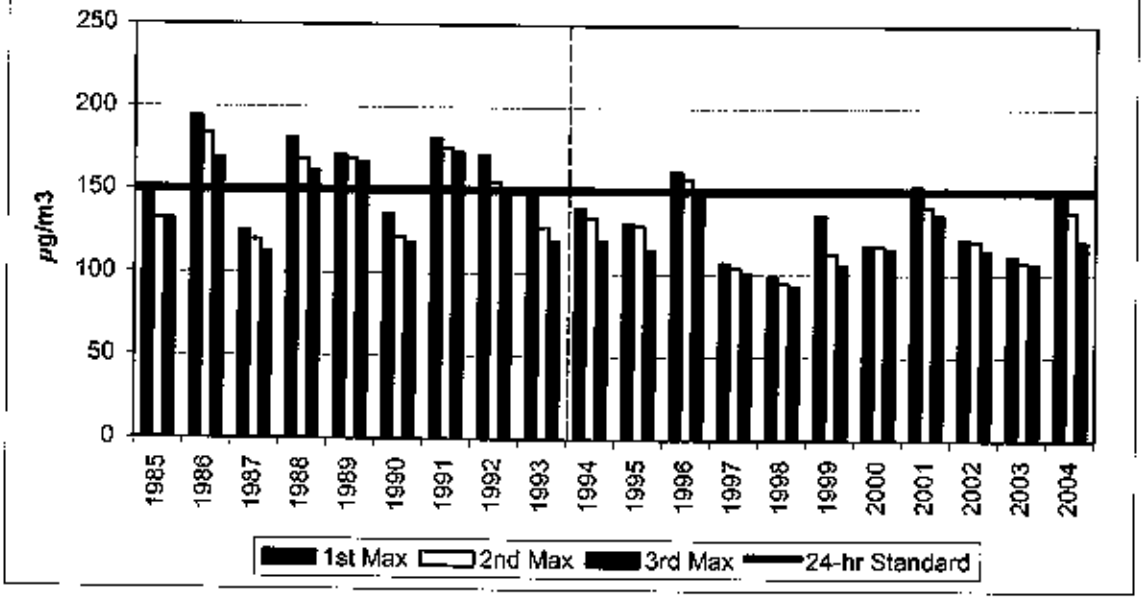
Monitors	AMC	Salt Lake	Hawthorne	Magna	N. Salt Lake	Cottonwood
1985					0	
1986		0			6.5	0
1987		0		2.4	0	0
1988		0		2.2	5.8	0
1989	8.7	0		0	3.3	0
1990	0	0		0	0	0
1991	15.9	8.4		0	13.5	8.4
1992	8.6	0		0	2.1	0
1993	0	0		0	0	0
1994	1	0		0	0	0
1995	0			0	0	0
1996	0			0	2.3	0
1997	0		0	0	0	0
1998	0		0	0	0	0
1999	0		0	0	0	0
2000			0	0	0	0
2001			0	0	0	0
2002			0	0	0	0
2003			0	0	0	0
2004			0	0	0	0

Figure IX.A.24. 3 Highest 24-hr Concentrations
Cottonwood - 49-035-0003



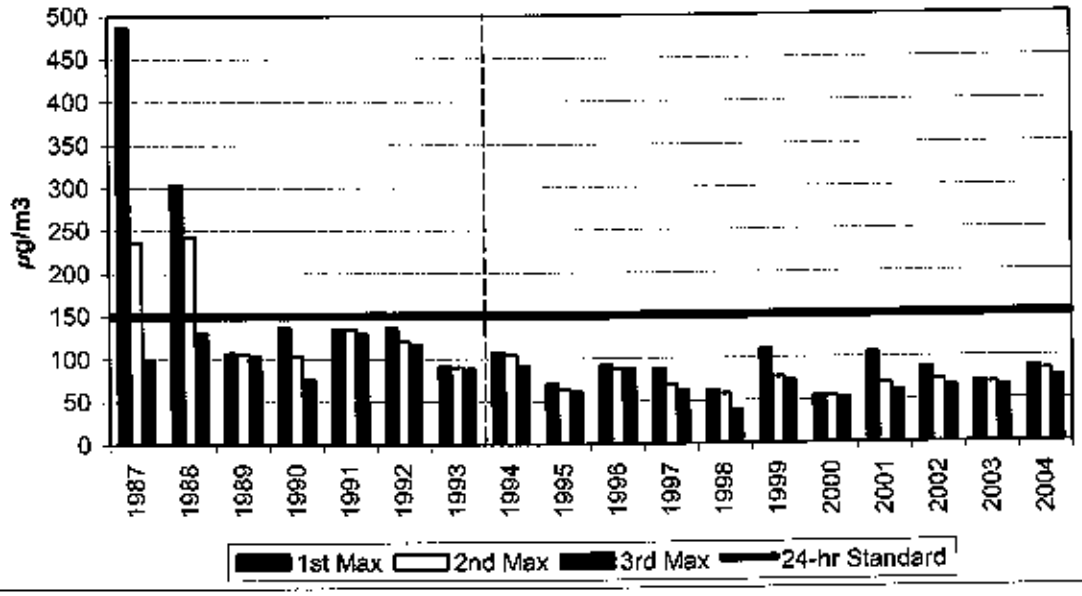
(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.25. 3 Highest 24-hr Concentrations
North Salt Lake - 49-035-0012



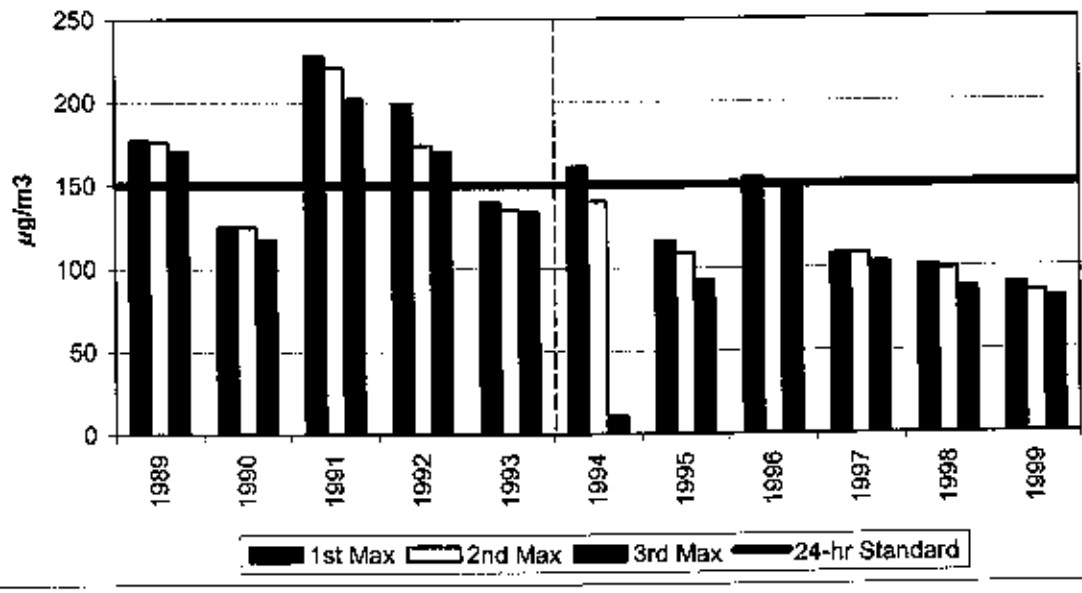
(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

FigureIX.A.26. 3 Highest 24-hr Concentrations
Magna - 49-035-1001



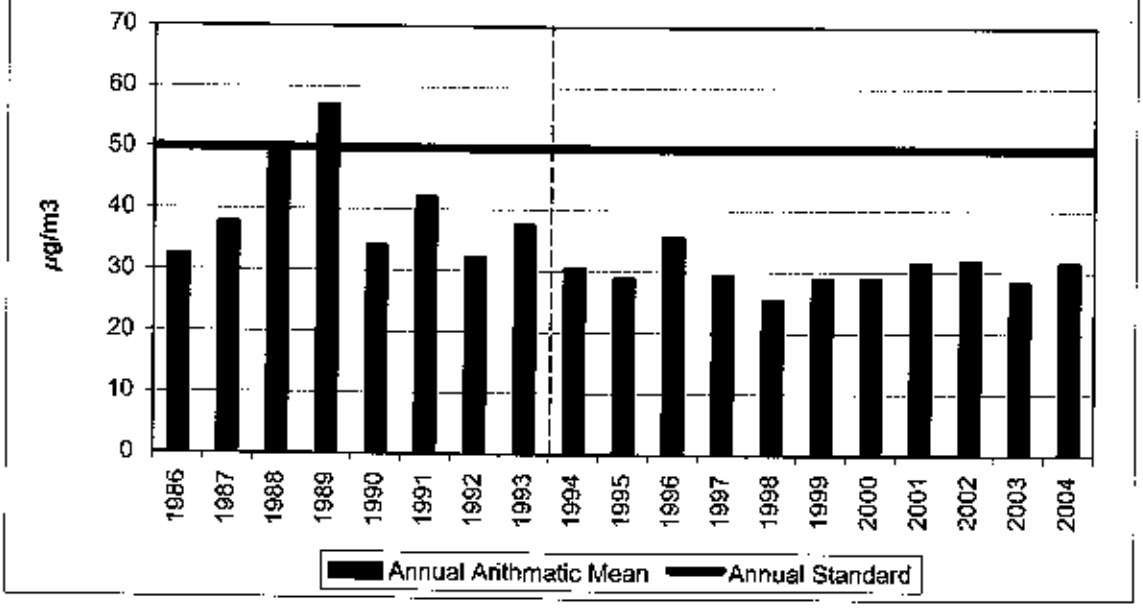
(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.27. 3 Highest 24-hr Concentrations
AMC - 49-035-0010



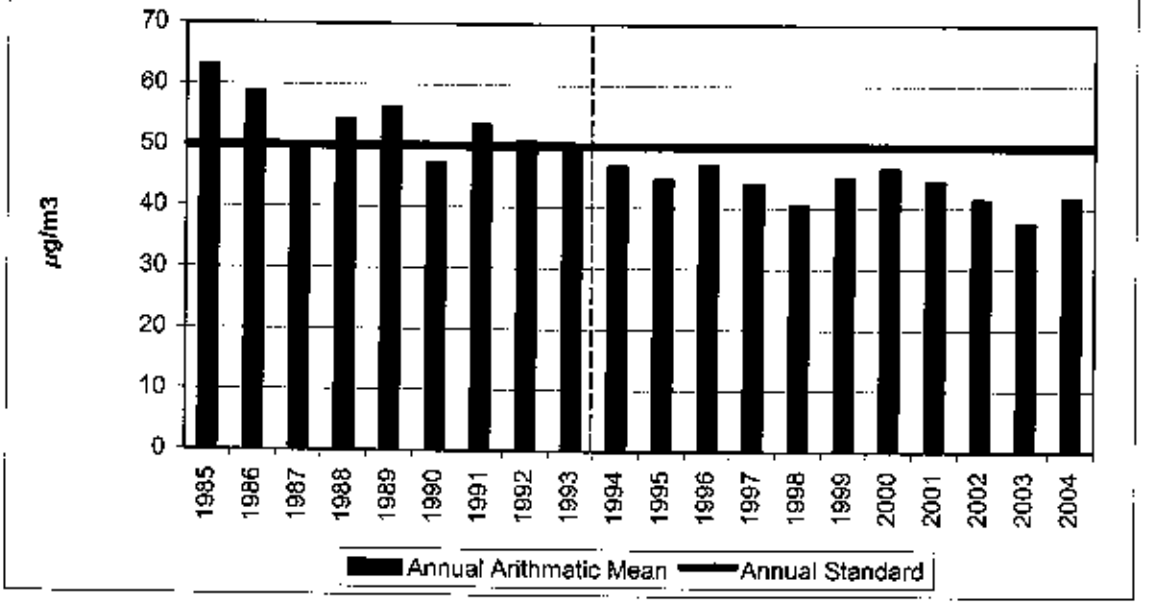
(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.28. Annual Arithmatic Mean
Cottonwood - 49-035-0003



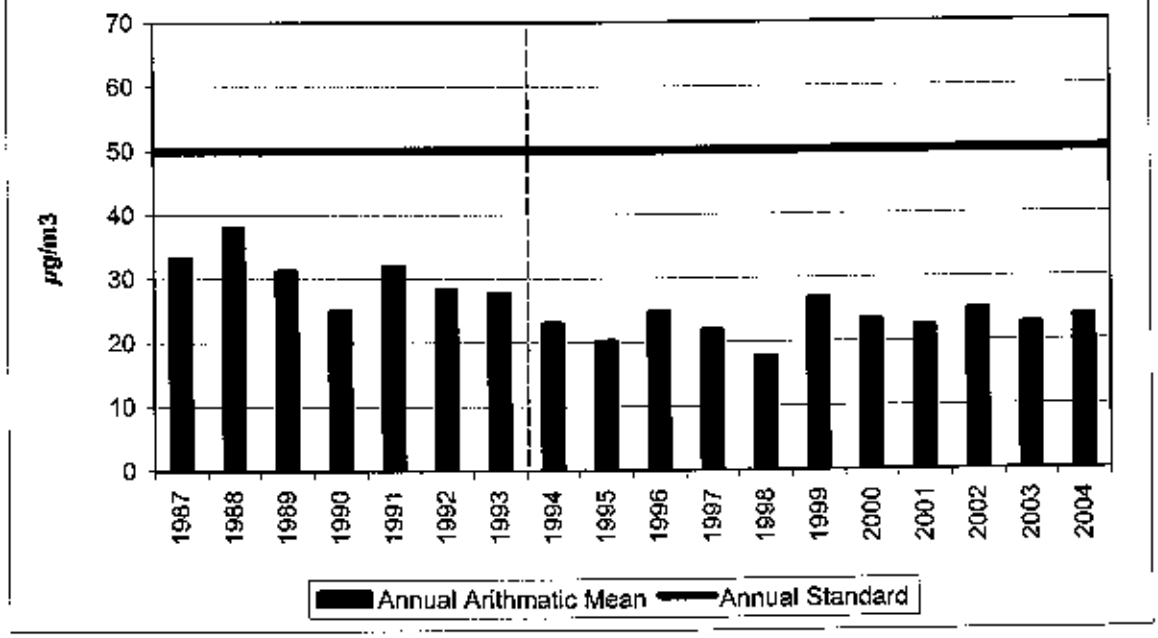
(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.29. Annual Arithmatic Mean
North Salt Lake - 49-035-0012



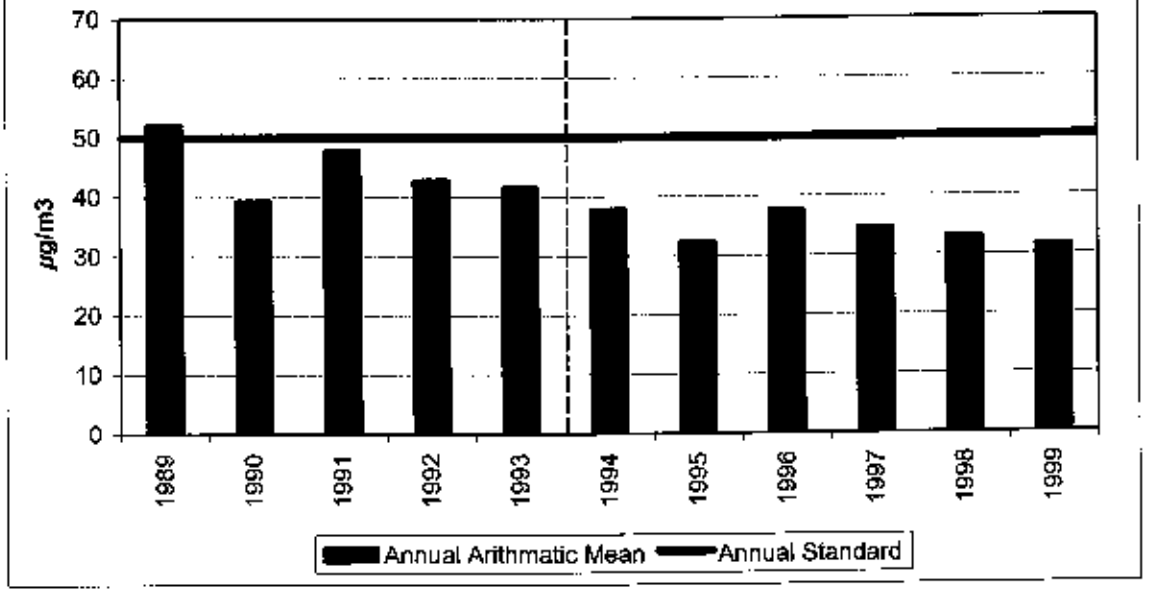
(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.30. Annual Arithmatic Mean
Magna - 49-035-1001



(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.31. Annual Arithmatic Mean
AMC - 49-035-0010

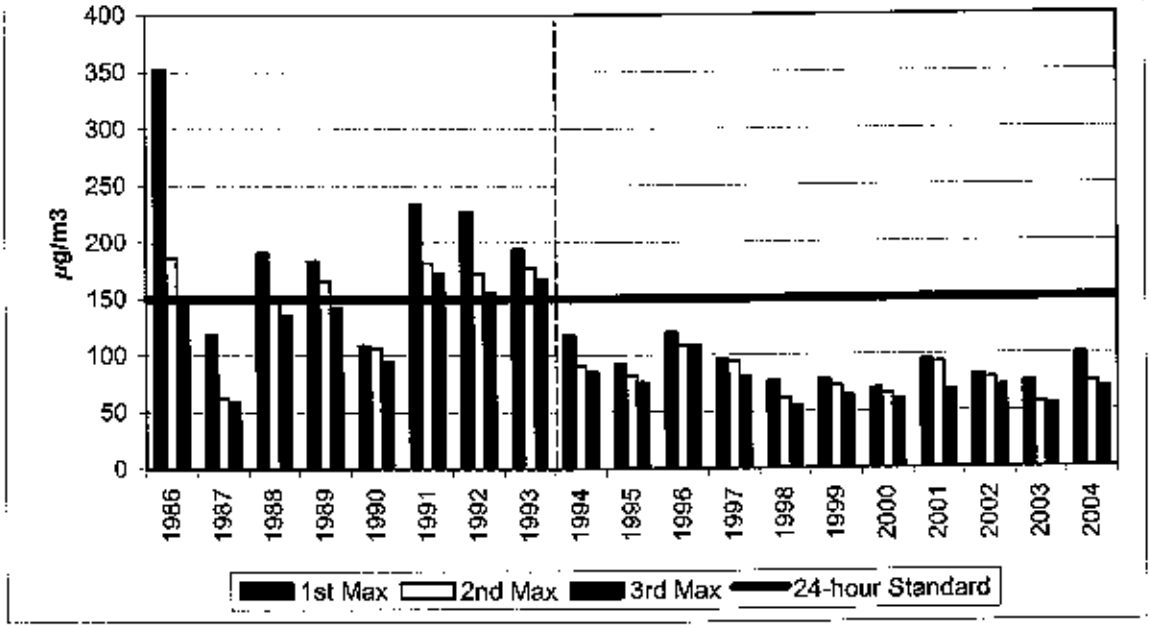


(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Table IX.A.34 Utah County Expected Exceedances per Year, 1985-2004

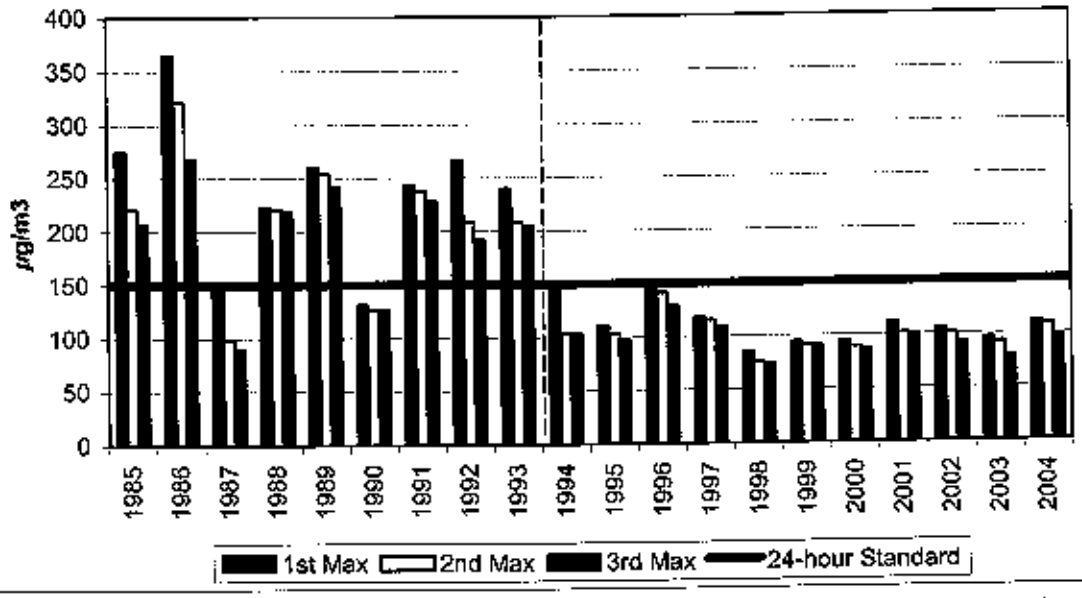
Monitor	Lindon	North Provo	West Orem
1985	8.7		
1986	9.1	14	
1987	0	0	
1988	15.9	2	4.4
1989	22.2	8	17.8
1990	0	0	0
1991	11.7	7.3	13.9
1992	5.3	3.1	5.2
1993	5.2	4.1	3.1
1994	0	0	0
1995	0	0	0
1996	0	0	0
1997	0	0	0
1998	0	0	0
1999	0	0	0
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0

Figure IX.A.32. 3 Highest 24-hr Concentrations
North Provo - 49-049-0001



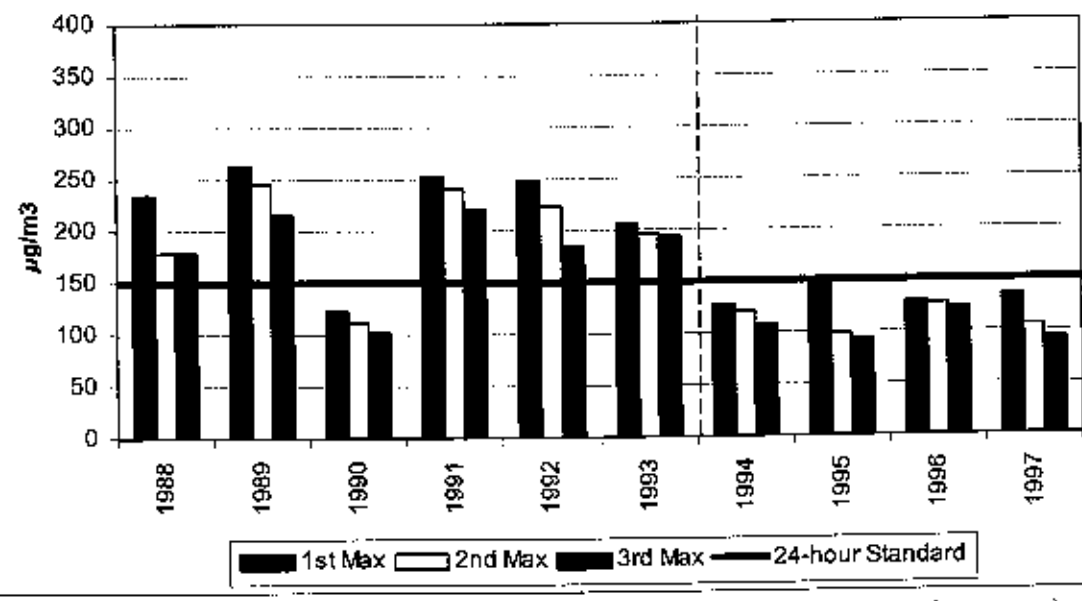
(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.33. 3 Highest 24-hr Concentrations
Lindon - 49-049-4001



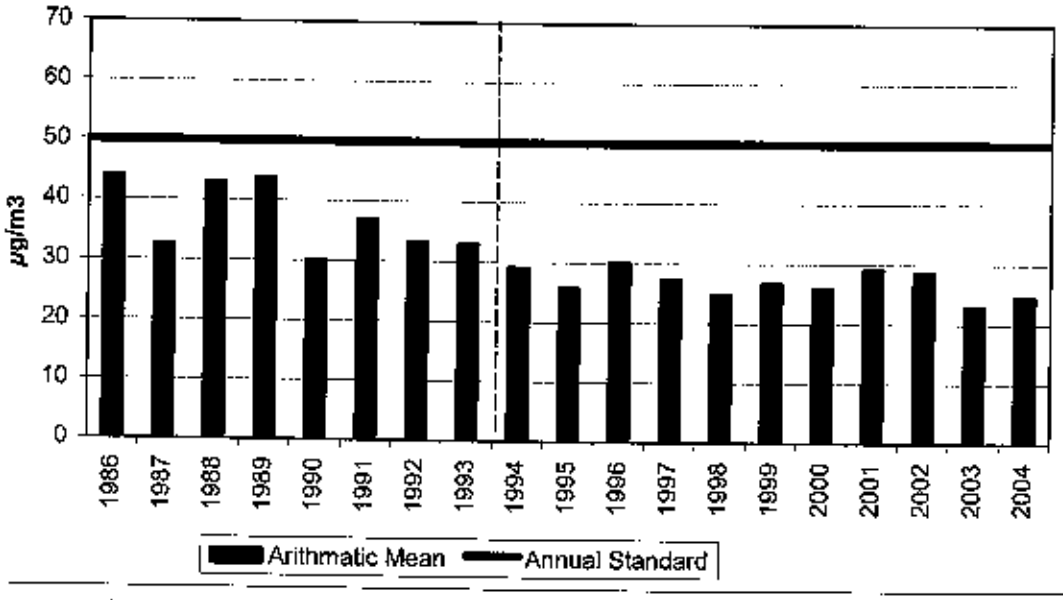
(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.34. 3 Highest 24-hr Concentrations
West Orem - 49-049-5001



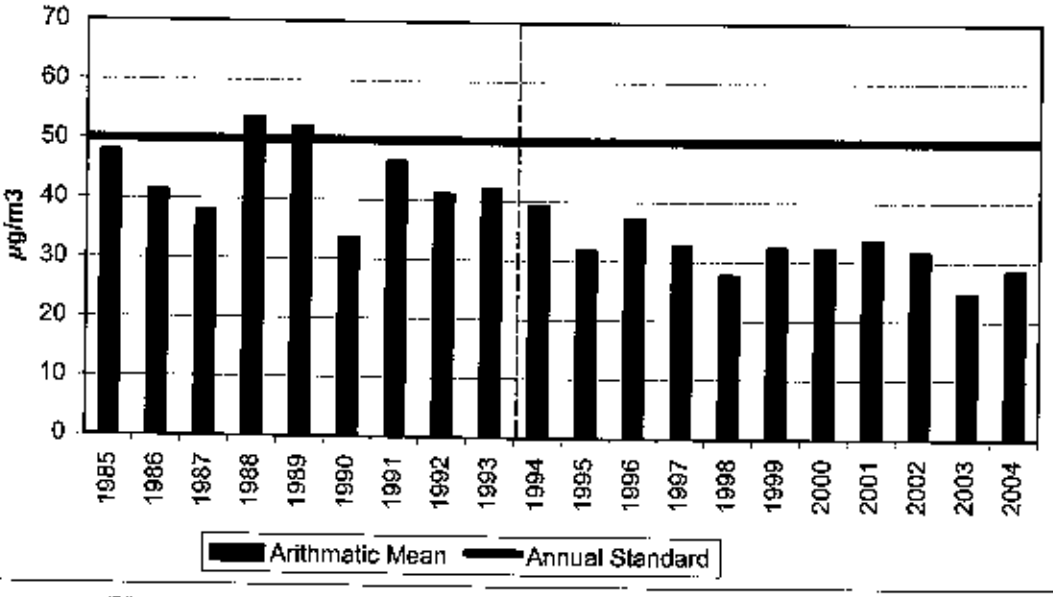
(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.35. Annual Arithmatic Mean
North Provo - 49-049-0001



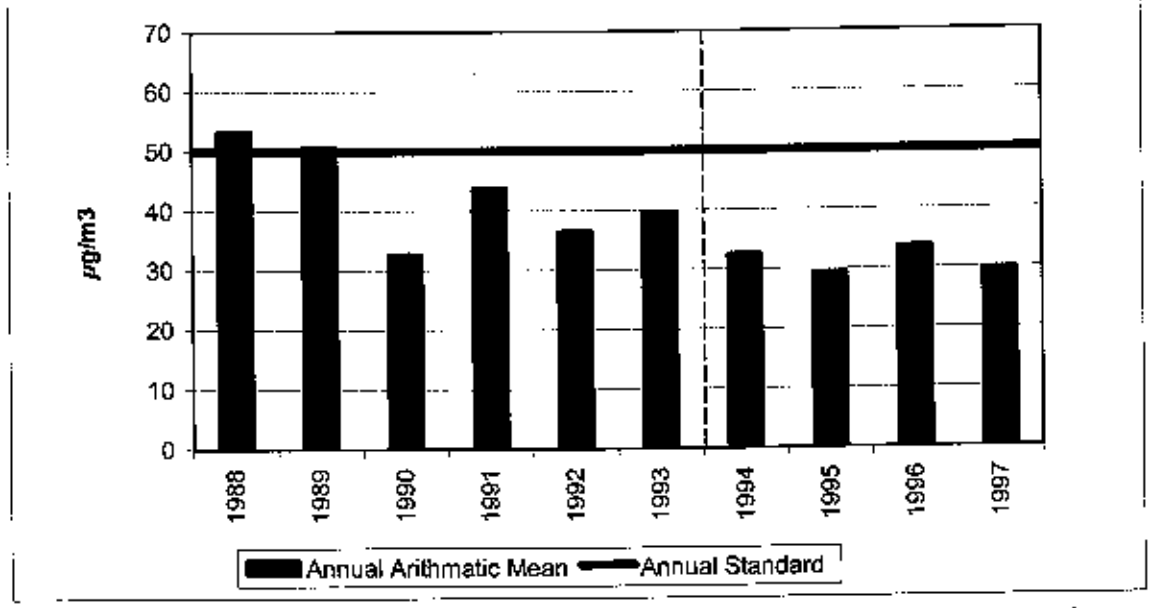
(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.36. Annual Arithmatic Mean
Lindon - 49-049-4001



(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Figure IX.A.37. Annual Arithmatic Mean
West Orem - 49-049-5001



(Vertical dotted line indicates complete implementation of 1991 SIP control measures.)

Table IX.A.35 Ogden City Expected Exceedances per Year, 1985-2004

Monitor	Ogden1	Ogden2
1985		
1986	0	
1987	0	
1988	0	
1989	0	
1990	0	
1991	2.1	
1992	2.1	
1993	2.1	
1994	0	
1995	0	
1996	0	
1997	0	
1998	0	
1999	0	
2000	0	
2001		0
2002		0
2003		0
2004		0

Figure IX.A.38. 3 Highest 24-hr Concentrations
Ogden1 - 49-057-0001

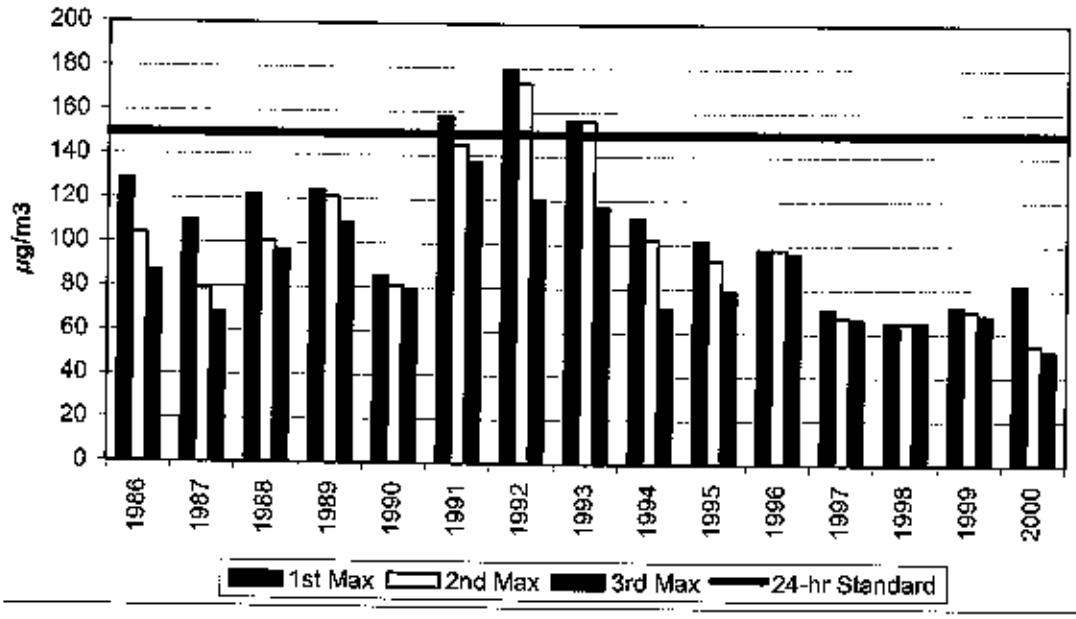
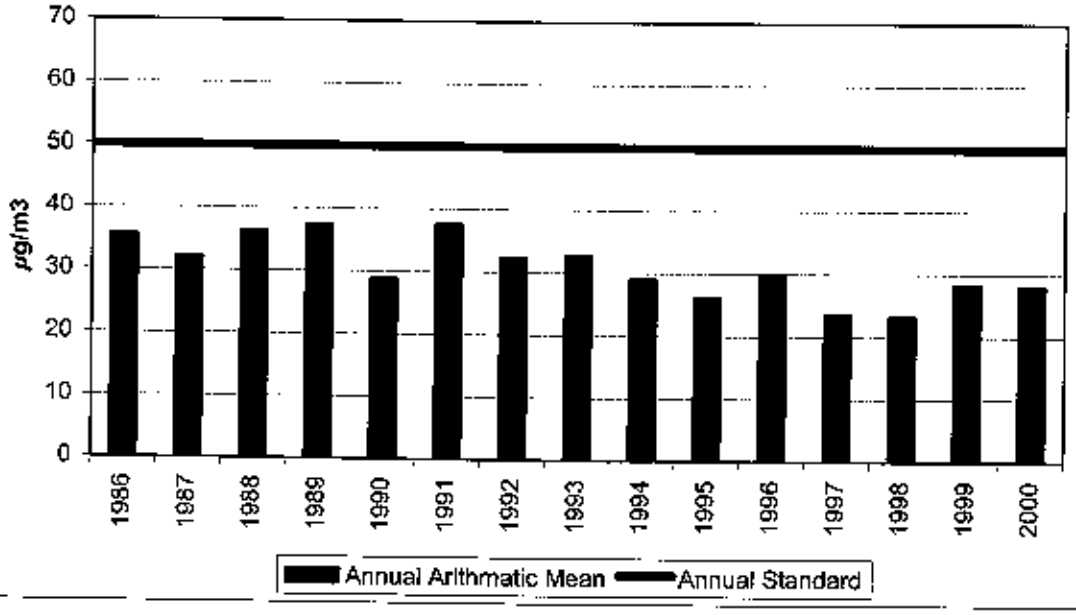


Figure IX.A.39. Annual Arithmatic Mean
Ogden1 - 49-057-0001



(b) Reduction in Emissions

As stated above, EPA guidance (Calcagni) says that the State must be able to reasonably attribute the improvement in air quality to emission reductions that are permanent and enforceable. In making this showing, the State should estimate the percent reduction (from the year that was used to determine the design value) achieved by Federal measures such as motor vehicle control, as well as by control measures that have been adopted and implemented by the State.

In both Salt Lake County and Utah County, the design values at each of the representative monitors were measured in 1988 or 1989 (see SIP Subsections IX.A.3-5).

Ogden City was designated nonattainment based on data collected in 1991 through 1993.

As mentioned before, the ambient air quality data presented in Subsection IX.A.10.b(3)(a) above includes values prior to these dates in order to give a representation of the air quality prior to the application of any control measures. It then includes data collected from then until the present time to illustrate the lasting effect of these controls. In discussing the effect of the controls, as well as the control measures themselves, however, it is important to keep in mind the time necessary for their implemention.

(i) Salt Lake County

The nonattainment SIPs for all initial moderate PM_{10} nonattainment areas included a statutory date for the implementation of reasonably available control measures (RACM). This date was December 10, 1993 (Section 189(a) CAA). Thus, 1994 marked the first year in which these control measures were reflected in the emissions inventories for Salt Lake County.

The nonattainment SIP for the Salt Lake County PM_{10} nonattainment area included control strategies for stationary sources and area sources (including controls for woodburning, mobile sources, and road salting and sanding) of primary PM_{10} emissions as well as sulfur oxide (SO_X) and nitrogen oxide (NO_X) emissions, which are secondary sources of particulate emissions. This is discussed in SIP Subsection IX.A.6, and was reflected in the attainment demonstration presented in Subsection IX.A.5.

The RACM control measures prescribed by the nonattainment SIP and their subsequent implementation by the State were discussed in more detail in a milestone report submitted for the area.

Section 189(c) of the CAA identifies, as a required plan element, quantitative milestones which are to be achieved every 3 years, and which demonstrate reasonable further progress (RFP) toward attainment of the standard by the applicable date. As defined in CAA Section 171(1), the term *reasonable further progress* has the meaning of such annual incremental reductions in emissions of the relevant air pollutant as are required by Part D of the Act for the purpose of ensuring attainment of the NAAQS by the applicable date.

Hence, the milestone report must demonstrate that all measures in the approved nonattainment SIP have been implemented and that the milestone has been met. In the case of initial moderate areas for PM_{10}, this first milestone had the meaning of all control measures identified in the plan being sufficient to bring the area into compliance with the NAAQS by the statutory attainment date of December 31, 1994.

Section 188(d) of the Act allows States to petition the Administrator for up to two one-year extensions of the attainment date, provided that all SIP elements have been implemented and that the ambient data collected in the area during the year preceding the extension year indicates that the area is on-target to attain the NAAQS. Presumably this is because the statutory attainment date for initial moderate PM_{10} nonattainment areas occured only one year after the statutory implementation date for RACM, the central control element of all implementation plans for such areas, and because three consecutive years of clean ambient data are needed to determine that an area has attained the standard. Because the milestone report and the request for extension of the attainment date both required a demonstration that all SIP elements had been implemented, as well as a showing of RFP, Utah combined these into a single analysis.

Utah's actions to meet these requirements and EPA's subsequent review thereof are discussed in a Federal Register notice from Monday, June 18, 2001 (66 FR 32752). In this notice, EPA granted a one-year extension of the attainment date for the Salt Lake County PM_{10} nonattainment area and determined that the area had attained the PM_{10} NAAQS by December 31, 1995. The key elements of that FR notice are reiterated below.

On May 11, 1995, Utah submitted a milestone report as required by sec.189(c)(2). On Sept.29, 1995, Utah submitted a revised version of the milestone report. It estimated current emissions from all source categories covered by the SIP and compared those to actual emissions from 1988. Based on information the State submitted in 1995 EPA believes that Utah was in substantial compliance with the requirements and commitments in the SIP for the Salt Lake County PM_{10} nonattainment area. The milestone report indicates that Utah had implemented most of its adopted control measures and had, therefore, substantially implemented the RACM/RACT requirements applicable to moderate PM_{10} nonattainment areas. It showed that in Salt Lake County, emissions of PM_{10}, SO_2 and NO_X had been reduced by approximately 60,752 tpy (from 150,292 down to 89,540). The effect of these emission reductions appears to be reflected in ambient measurements at the monitoring site [and] is evidence that the State's implementation of the PM_{10} SIP control measures resulted in emission reductions amounting to RFP in the Salt Lake County PM_{10} nonattainment area.

This Federal Register notice (66 FR 32752) and the milestone report from September 29, 1995 have been included in the TSD.

Furthermore, since these control measures are incorporated into the Utah SIP, the emission reductions that resulted are consistent with the notion of permanent and enforceable improvements in air quality. Taken together, the trends in ambient air quality illustrated in the preceding paragraph, along with the continued implementation of the nonattainment SIP for the Salt Lake County nonattainment area, provide a reliable indication that these improvements in air quality reflect the application of permanent steps to improve the air quality in the region, rather than just temporary economic or meteorological changes.

(ii) Utah County

The nonattainment SIPs for all initial moderate PM_{10} nonattainment areas included a statutory date for the implementation of reasonably available control measures (RACM). This date was December 10, 1993 (Section 189(a) CAA). Thus, 1994 marked the first year in which these control measures were reflected in the emissions inventories for Utah County.

The nonattainment SIP for the Utah County PM_{10} nonattainment area included control strategies for stationary sources and area sources (including controls for woodburning, mobile sources, and road salting and sanding) of primary PM_{10} emissions as well as sulfur oxide (SO_X) and nitrogen

oxide (NO_X) emissions, which are secondary sources of particulate emissions. This is discussed in SIP Subsection IX.A.6, and was reflected in the attainment demonstration presented in Section IX.A.3.

The RACM control measures prescribed by the nonattainment SIP and their subsequent implementation by the State were discussed in more detail in a milestone report submitted for the area.

Section 189(c) of the CAA identifies, as a required plan element, quantitative milestones which are to be achieved every 3 years, and which demonstrate reasonable further progress (RFP) toward attainment of the standard by the applicable date. As defined in CAA Section 171(1), the term reasonable further progress has the meaning of such annual incremental reductions in emissions of the relevant air pollutant as are required by Part D of the Act for the purpose of ensuring attainment of the NAAQS by the applicable date.

Hence, the milestone report must demonstrate that all measures in the approved nonattainment SIP have been implemented and that the milestone has been met. In the case of initial moderate areas for PM_{10}, this first milestone had the meaning of all control measures identified in the plan being sufficient to bring the area into compliance with the NAAQS by the statutory attainment date of December 31, 1994.

Section 188(d) of the Act allows States to petition the Administrator for up to two one-year extensions of the attainment date, provided that all SIP elements have been implemented and that the ambient data collected in the area during the year preceding the extension year indicates that the area is on-target to attain the NAAQS. Presumably this is because the statutory attainment date for initial moderate PM_{10} nonattainment areas occured only one year after the statutory implementation date for RACM, the central control element of all implementation plans for such areas, and because three consecutive years of clean ambient data are needed to determine that an area has attained the standard. Because the milestone report and the request for extension of the attainment date both required a demonstration that all SIP elements had been implemented, as well as a showing of RFP, Utah combined these into a single analysis.

Utah's actions to meet these requirements, and EPA's subsequent review thereof are discussed in a Federal Register notice from Monday, June 18, 2001 (66 FR 32752). In this notice, EPA granted two one-year extensions of the attainment date for the Utah County PM_{10} nonattainment area and determined that the area had attained the PM_{10} NAAQS by December 31, 1996. The key elements of that FR notice are reiterated below.

On May 11, 1995, Utah submitted a milestone report as required by sec.189(c)(2). On Sept.29, 1995, Utah submitted a revised version of the milestone report. It estimated current emissions from all source categories covered by the SIP, and compared those to actual emissions from 1988. Based on information the State submitted in 1995 EPA believes that Utah was in substantial compliance with the requirements and commitments in the SIP for the Utah County PM_{10} nonattainment area when Utah submitted its first extension request. The milestone report indicates that Utah had implemented most of its adopted control measures, and had therefore substantially implemented the RACM/RACT requirements applicable to moderate PM_{10} nonattainment areas. It showed that in Utah County, emissions of PM_{10}, SO_2 and NO_X had been reduced by approximately 3,129 tpy (from 25,920 down to 22,791). With its March 27, 1996 request for an additional extension year, Utah submitted another milestone report (and revised it again on May 17) which repeated this exercise using more current numbers. The results this time showed that emissions had been reduced by approximately 8,391 tpy. The effect of these emission reductions appears to be reflected in ambient measurements at the monitoring sites [and]

this is evidence that the State's implementation of the PM_{10} SIP control measures resulted in emission reductions amounting to RFP in the Utah County PM_{10} nonattainment area.

This Federal Register notice (66 FR 32752), the milestone report from September 29, 1995, and the milestone report from May 17, 1996 have all been included in the TSD.

Furthermore, since these control measures are incorporated into the Utah SIP, the emission reductions that resulted are consistent with the notion of permanent and enforceable improvements in air quality. Taken together, the trends in ambient air quality illustrated in the preceding paragraph, along with the continued implementation of the nonattainment SIP for the Utah County nonattainment area, provide a reliable indication that these improvements in air quality reflect the application of permanent steps to improve the air quality in the region, rather than just temporary economic or meteorological changes.

(iii) Ogden City

For Ogden City, the statutory date for RACM implementation was four years after designation, or September 26, 1999. Its attainment date was December 31, 2001. As discussed earlier, there was no nonattainment SIP for Ogden City, but there were a number of control measures that applied to nonattainment areas in general and were at least partly responsible for bringing the area into compliance with the PM_{10} NAAQS.

Since these control measures (open burning rule, visible emissions rule, fugitive dust rule, and vehicle I/M) were incorporated into the Utah SIP, the emission reductions that resulted are consistent with the notion of permanent and enforceable improvements in air quality. Taken together, the trends in ambient air quality illustrated in the preceding paragraph, along with the continued implementation of these control measures, provide a reliable indication that these improvements in air quality reflect the application of permanent steps to improve the air quality in the region, rather than just temporary economic or meteorological changes.

In addition, Ogden began participating in the woodburning program on a voluntarily basis during the winter of 1993.

(4) State has Met Requirements Under Section 110 and Part D

CAA 107(d)(3)(E)(v) - The State containing such area has met all requirements applicable to the area under section 110 and part D. Section 110 of the CAA deals with the broad scope of state implementation plans and the capacity of the respective state agency to effectively administer such a plan. Sections I through VIII of Utah's SIP contain information relevant to these criteria. Part D deals specifically with plan requirements for nonattainment areas, and includes the requirements for a maintenance plan in Section 175A.

Utah currently has an approved SIP that meets the requirements of section 110(a)(2) of the Federal Clean Air Act. Many of these elements have been in place for several decades. In the March 9, 2001 approval of Utah's Ogden City Maintenance Plan for Carbon Monoxide, EPA stated:

> On August 15, 1984, we approved revisions to Utah's SIP as meeting the requirements of section 110(a)(2) of the CAA (see 45 FR 32575). Although section 110 of the CAA was amended in 1990, most of the changes were not substantial. Thus, we have determined that the SIP revisions approved in 1984

continue to satisfy the requirements of section 110(a)(2). For further detail, see 45 FR 32575 (FR August 15, 1984 (Volume 66, No. 47), page 14079.)

(5) Maintenance Plan for PM_{10} Areas

As stated in the Act, an area may not request redesignation to attainment without first submitting, and then receiving EPA approval of, a maintenance plan. The plan is basically a quantitative showing that the area will continue to attain the NAAQS for an additional 10 years (from EPA approval), accompanied by sufficient assurance that the terms of the numeric demonstration will be administered by the State and by the EPA in an oversight capacity. The maintenance plan is the central criterion for redesignation. It is contained in the following subsection.

IX.A.10.c Maintenance Plan

CAA 107(d)(3)(E)(iv) - The Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A. An approved maintenance plan is one of several criteria necessary for area redesignation as outlined in CAA 107(d)(3)(E). The maintenance plan itself, as described in Section 175A of the CAA and further addressed in EPA guidance (Procedures for Processing Requests to Redesignate Areas to Attainment, John Calcagni to Regional Air Directors, September 4, 1992; or for the purpose of this document, simply "Calcagni"), has its own list of required elements. The following table is presented to summarize these requirements. Each will then be addressed in turn.

Table IX.A.36 Requirements of a Maintenance Plan

Category	Requirement	Reference	Addressed in Section
Maintenance demonstration	Provide for maintenance of the relevant NAAQS in the area for at least 10 years after redesignation.	CAA: Sec 175A(a)	IX.A.10.c(1)
Revise in 8 Years	The State must submit an additional revision to the plan, 8 years after redesignation, showing an additional 10 years of maintenance.	CAA: Sec 175A(b)	IX.A.10.c(8)
Continued Implementation of Nonattainment Area Control Strategy	The Clean Air Act requires continued implementation of the nonattainment area control strategy unless such measures are shown to be unnecessary for maintenance or are replaced with measures that achieve equivalent reductions.	CAA: Sec 175A(c), CAA Sec 110(l), Calcagni memo	IX.A.10.c(7)
Contingency Measures	Areas seeking redesignation from nonattainment to attainment are required to develop contingency measures that include State commitments to implement additional control measures in response to future violations of the NAAQS.	CAA: Sec 175A(d)	IX.A.10.c(10)
Verification of Continued Maintenance	The maintenance plan must indicate how the State will track the progress of the maintenance plan.	Calcagni memo	IX.A.10.c(9)

(1) Demonstration of Maintenance - Modeling Analysis

CAA 175A(a) - Each State which submits a request under section 107(d) for redesignation of a nonattainment area as an area which has attained the NAAQS shall also submit a revision of the applicable implementation plan to provide for maintenance of the NAAQS for at least 10 years after the redesignation. The plan shall contain such additional measures, if any, as may be required to ensure such maintenance. The maintenance demonstration is discussed in EPA guidance (Calcagni) as one of the core provisions that should be considered by states for inclusion in a maintenance plan.

According to Calcagni, a State may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory (discussed below) or by modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS. Utah has elected to make its demonstration based on air quality modeling. The guidance goes on to say that, in cases where a nonattainment SIP was based on air quality modeling, the maintenance plan should be based upon the same level of modeling used before. Furthermore, it says, such modeling should be consistent with current EPA modeling guidance.

The existing PM_{10} nonattainment SIP demonstrations for both Salt Lake and Utah Counties were based on a statistical modeling approach called chemical mass balance (CMB). This is a receptor based model that does not directly factor meteorology or dispersion characteristics into its predictions. Furthermore, CMB is limited in its treatment of secondary aerosol formation, which has historically accounted for between 65% and 85% of the overall PM_{10} collected at the monitoring stations. While the success of these nonattainment SIPs is more or less an endorsement of the CMB modeling upon which they were founded, EPA felt that any subsequent demonstration of maintenance should rely instead on a model that is more comprehensive in its assumptions.

In consultation with EPA Region VIII, DAQ decided to base the new Maintenance Plan upon a grid-based aerosol model called UAM-AERO. This model is an extension of the widely used photochemical model, the Urban Airshed Model (UAM) Version IV, which has been adapted to treat aerosol processes. DAQ established a UAM-AERO modeling domain that included each of Utah's three PM_{10} nonattainment areas. This single comprehensive modeling analysis serves as the basis for the maintenance demonstration for each area.

The model was applied to address elevated 24-hour concentrations of PM_{10} along the Wasatch Front (WF). These develop during winter-time episodes of regional scale high pressure and associated valley temperature inversions. The inversions promote the accumulation of PM_{10} and PM_{10} precursor gases that lead to significant secondary aerosol formation. Before the nonattainment SIPs were implemented, these ambient values often exceeded the 24-hour health standard for PM_{10}.

In this analysis, DAQ has employed UAM-AERO to evaluate the airshed under worst case winter-time inversion conditions. In order to do so, the model considers two historical episodes: 1) January 1-10, 2001 and 2) February 1-8, 2002. Episode selection was based on criteria that included meteorology, observed PM_{10} concentrations, and data availability. Further discussion concerning episode selection can be found in Section 2 of the modeling portion of the technical support document (TSD).

Despite numerous severe inversion episodes during the past decade, PM_{10} concentrations have not been sufficient to cause a violation of the NAAQS. Consequently, the two selected episodes do

not represent NAAQS violations, but do capture elevated PM_{10} concentrations, worst-case meteorology, and current emission levels. Therefore, by modeling these episodes and projecting emissions into future years, the analysis should accurately reflect the ability of the nonattainment areas to maintain the PM_{10} NAAQs over the next 10 years.

The DAQ modeling analysis requires two main inputs: meteorological data and emissions data. The applications of these inputs are discussed below.

(a) Meteorological data

Recent UDAQ meteorological modeling projects using advanced "state of the science" models have proven unsuccessful in simulating highly variable Wasatch Front meteorology during inversion conditions. Initial modeling attempts for the January 2001 and February 2002 episodes also proved unsuccessful due to the inability of the model to reproduce the highly variable meteorology (wind fields) and elevated PM_{10} concentrations observed during the episodes.

In order to develop the most realistic metrological analysis, a 4-phase Diagnostic Wind Model (DWM) modeling approach was utilized. In the first 3 phases, DWM used 3 unique combinations of observed meteorological data for each analysis. None of the analyses produced a realistic wind field. The 3 wind fields were unable to capture and elevate PM_{10} concentrations within the Wasatch Front inversion.

In Phase 4, UDAQ developed a wind field that fits the conceptual understanding of Wasatch Front inversion conditions. A bi-modal idealized wind field was created in the attempt to retain and elevate pollutants. The Phase 4 meteorological analysis was successful in reproducing elevated PM_{10} concentrations. UDAQ considers this analysis to be conservative with respect to predicted PM_{10} concentrations.

(b) Emissions Data

Area, point, and mobile emissions inventories were compiled for all sources within the modeling domain. Inventories included primary PM_{10}, sulfur dioxide (SO_2), oxides of nitrogen (NO_X), carbon monoxide (CO), and volatile organic compounds (VOC). In addition, an ammonia (NH_3) inventory was estimated for area and mobile sources. Estimates of biogenic emissions were not included in the analysis because the episodes occurred in January and February when biogenic emissions are negligible. Other seasonal adjustments were also made to the inventory (adjustments are described in the modeling portion of the TSD). Base-year and projection inventories are also described in more detail in the TSD.

Emission inventories are processed and spatially placed in the modeling domain by the Sparse Matrix Operator Kernel Emission (SMOKE) modeling system. SMOKE was developed by EPA for integration into the Models-3 Air Quality Modeling System and has been used in many air quality studies. To ensure that the model represents actual emissions during each model episode day, SMOKE uses source specific Source Classification Codes to chemically speciate and temporally allocate emissions. In addition, SMOKE uses other emission characteristics, such as stack height, exit velocity, and plume temperature to place emissions in the correct vertical layer of UAM-AERO. Mobile and other area source emissions are treated as ground level emissions and input into the lowest model layer.

(c) Modeling Results

Projection year modeling was completed for the years 2005, 2008, 2011, 2014, 2015, and 2017. EPA's most current modeling guidance recommends that model predictions be used in a relative sense rather than an absolute sense. Applying the model this way is done by calculating a "relative reduction factor" (RRF) for grid cells that are co-located with a PM_{10} monitor. RRF values were computed for each day of the base-case modeling years (January 2001 and February 2002) and subsequently applied to the future year predictions. The technique for creating the individual RRF is described in section 7 of the modeling TSD.

Results demonstrated that modeled PM_{10} concentrations are highest in 2005. From there they decline until reaching a minimum value in 2011 or 2014, and then increase again through 2017. No PM_{10} values greater than 150 ug/m3 were modeled for any *ambient air* using either episode. Ambient air means anywhere that would be accessible to the general public. There were two grid cells which showed predicted concentrations in excess of 150 ug/m^3, but they are both located on the property of Kennecott Utah Copper Corp. The general public does not have access to this area, and so these grid-cells do not represent ambient air. Results of the modeling analysis are presented below for each of Utah's three PM_{10} nonattainment areas.

Figure IX.A.40. Highest Predicted 24-hr Concentration Salt Lake County

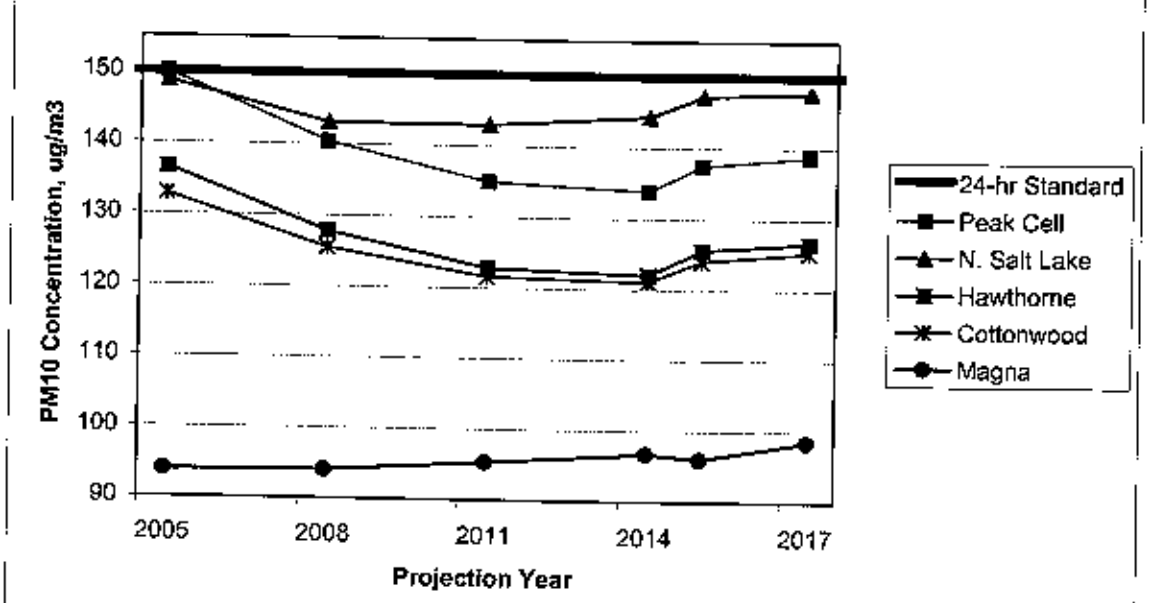


Figure IX.A.40 above illustrates the trend of predicted concentrations at the monitoring stations and the highest modeled grid cells in the Salt Lake County PM_{10} nonattainment area and the entire domain. The peak cell is near the Cottonwood monitor. These data reflect the modeled PM_{10} concentrations after application of the RRF.

Figure IX.A.41. Highest Predicted 24-hr Concentration
Utah County

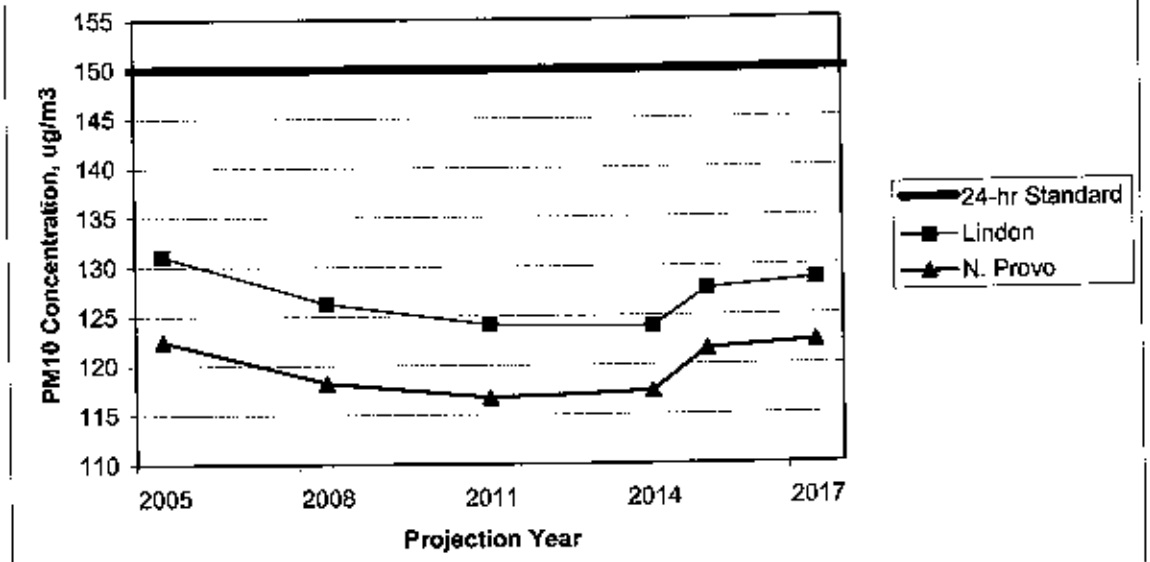


Figure IX.A.41 above illustrates the trend of predicted concentrations at the highest modeled grid-cells in the Utah County PM_{10} nonattainment area. The highest grid cell is located near the Lindon monitor. The data reflects the modeled PM_{10} concentrations after application of the RRF. The model predicts a significant margin of "safety" with respect to the health standard throughout the projection years.

Figure IX.A.42. Highest Predicted 24-hr Concentration Ogden City

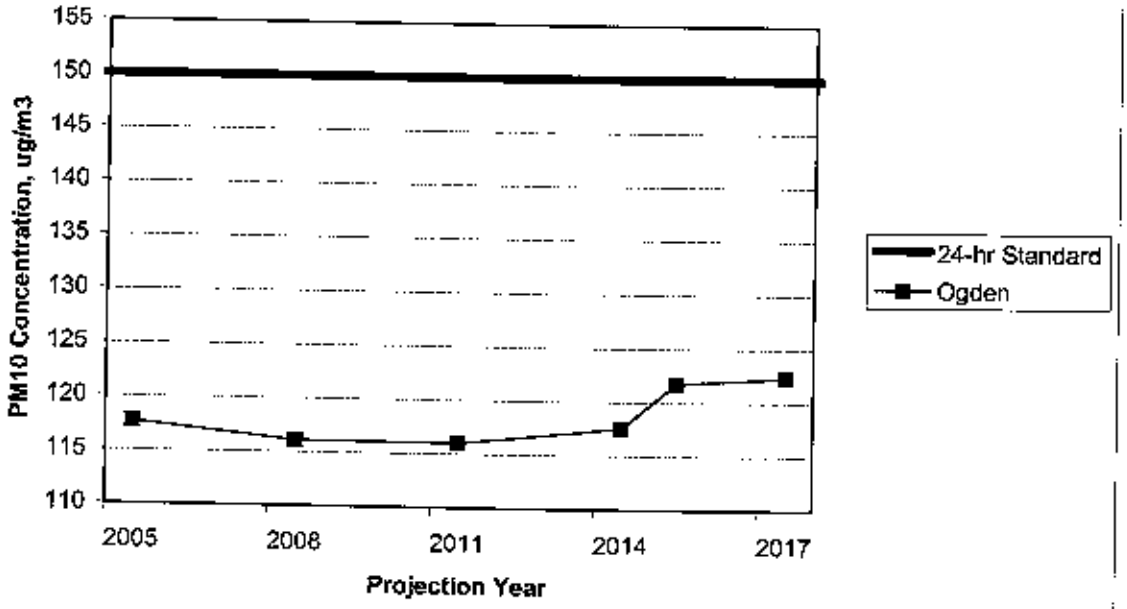


Figure IX.A.42 above illustrates the trend of predicted concentrations at the highest modeled grid cells in the Ogden City PM_{10} nonattainment area. The monitor is located in this highest grid cell. The data reflects the modeled PM_{10} concentrations after application of the RRF. The model predicts a significant margin of "safety" with respect to the health standard throughout the projection years.

(d) Annual Standard

As presented above, the modeled demonstration of maintenance was designed to address the 24-hour standard for PM_{10} during the winter conditions that drive secondary aerosol formation. This scenario has historically led to elevated concentrations of PM_{10} along the Wasatch Front.

The attainment demonstrations in the 1991 PM_{10} SIP were also designed to address the 24-hour standard, based on EPA guidance which states that "The SIP related emission limits should be based on the NAAQS (annual or 24-hour) which result in the most stringent control requirements" (see Subsection IX.A.9). As stated (by EPA or in that version of the SIP), it was assumed that "the application of many of the control strategies that are being implemented to reduce the 24-hour PM_{10} concentrations will also result in a reduction of the annual PM_{10} concentrations even though they are designed to reduce wintertime 24-hr concentrations." Due to the disparity in concentrations observed during the remainder of the year, "the winter season is the period that has the greatest impact on the annual average (see Table IX.A.24), and controlling PM_{10} concentrations during the winter will have the greatest impact on the annual average."

As discussed in the section concerning improvements in air quality, the downward trend in the annual arithmetic mean concentrations is reflective of these control strategies, many of which were directed at the wintertime 24-hour concentrations. This corroborates the assumption made in the 1991 SIP.

This maintenance plan will continue to rely upon that assumption. Since the control strategies required by the 1991 SIP were sufficient to achieve compliance with the 24-hour standard, the maintenance plan requires no new control strategies for continued compliance. Since the controls required by the 1991 SIP were deemed sufficient to ensure compliance with the annual standard, no further controls will be necessary to achieve continued compliance with that standard either. Thus, the modeled demonstration of attainment for the 24-hour PM_{10} standard provides adequate assurance that the annual PM_{10} standard will be protected as well.

The annual PM_{10} standard was never violated in Ogden City.

(e) Magna

The violations of the PM_{10} standard in Magna were caused primarily by the blowing of tailings from the Kennecott tailings pond under certain meteorological conditions while the plant was shut down.

While this scenario was never explicitly modeled in the 1991 SIP, it was addressed by requiring reasonably available control methods (RACM), which took the form of a comprehensive fugitive dust plan. The terms of this dust plan have been incorporated into the SIP at Section IX Part H.

(2) Attainment Inventory

The attainment inventory is discussed in EPA guidance (Calcagni) as another one of the core provisions that should be considered by states for inclusion in a maintenance plan.

According to Calcagni, the stated purpose of the attainment inventory is to establish the level of emissions during the time periods associated with monitoring data showing attainment.

In cases such as this, where a maintenance demonstration is founded on a modeling analysis, the attainment inventory is necessary to validate the model with respect to the ambient measurements that were made at the air monitoring locations during the commensurate period in time. For this analysis, base-year attainment inventories were compiled for 2001 and 2002.

Continued attainment is then demonstrated by running an air quality model, which considers factors related to meteorology, topography, and certain stack characteristics as well as the emissions of an air contaminant. After evaluating all of these factors, the model predicts concentrations of the air contaminant that are then compared to the health standard.

This implies that the analysis will require additional projection year inventories. Calcagni speaks to this as well, noting that the projection inventory should consider future growth, including population and industry, should be consistent with the base-year attainment inventory, and should document data inputs and assumptions. Any assumptions concerning emission rates must reflect permanent, enforceable measures.

Utah has compiled both attainment and projection inventories for use in a quantitative modeling demonstration. The emissions contained in the inventories include sources located within a regional area called a modeling domain. The modeling domain encompasses all three areas within the state that were designated as nonattainment areas for PM_{10}: Salt Lake County, Utah County, and Ogden City, as well as a bordering region.

There are three general categories of sources included in these inventories: industrial point sources, smaller area sources, and mobile sources.

For each of these source categories, the pollutants that were inventoried included: particulate matter with an aerodynamic diameter of ten microns or less (PM_{10}), sulfur dioxide (SO_2), oxides of nitrogen (NO_X), carbon monoxide (CO), and volatile organic compounds (VOC). SO_2 and NO_X are specifically defined as PM_{10} precursors, that is, compounds that, after being emitted to the atmosphere, undergo chemical or physical change to become PM_{10}. Any PM_{10} that is created in this way is referred to as secondary aerosol. The UAM-AERO model also considers ammonia, CO and VOC to be contributing factors in the formation of secondary aerosol.

The unit of measure for point and area sources is the traditional tons per year, but the UAM-AERO model includes a pre-processor that converts these emission rates to hourly increments throughout each day for each episode. Mobile source emissions are reported in terms of tons per day, and are also pre-processed by the model.

The basis for the point source and area inventories, for both the base-year attainment inventories as well as all future-year projection inventories, was the 2001 inventory of actual emissions that had already been compiled by the Division of Air Quality.

Area sources, as well as the smaller point sources, were projected forward from 2001, using population and economic forecasts from the Governor's Office of Planning and Budget.

The larger point sources - those whose emissions could exceed 100 tons per year (tpy) of PM_{10}, 200 tpy NO_X, or 250 tpy SO_2 - were projected somewhat differently. These sources were evaluated at their maximum emission rates, based on existing regulatory conditions of operation and construction. Furthermore, they were evaluated on their capability to emit on a short-term basis. As such, the projected emissions from these large sources reflect enforceable emission limits that are pertinent to the protection of public health with respect to a 24-hour standard for PM_{10}. Point source projections also include any current emission reduction credits (banked emissions).

Mobile source emissions were calculated for each year using MOBILE6.1/6.2 in conjunction with the appropriate estimates for vehicle miles traveled (VMT). VMT estimates for the urban counties were based on a travel demand model that is only run periodically for specific projection years. VMT for intervening years were estimated by interpolation.

Since this SIP subsection takes the form of a maintenance plan, it must demonstrate that the area will continue to attain the PM_{10} NAAQS throughout a period of ten years from the date of EPA approval. It is also necessary to "spot check" this ten-year interval. Hence, projection inventories were prepared for the following years: 2005, 2008, 2011, 2014, and 2017 (the ten-year mark from anticipated EPA approval). 2015 was also projected as possible planning year for the purpose of future transportation conformity analyses.

The following table is provided to summarize these inventories. As described, they represent point, area, and mobile sources in the modeling domain. They include PM_{10}, SO_2, NO_X, CO and VOC, and they span from the base-years (2001 and 2002) through the projection years of 2005, 2008, 2011, 2014, and 2017.

Table IX.A.37 Emission Inventories for the Modeling Domain. Actual Emissions for 2001-2002; Emission Projections for 2005-2017

Input

CO	2001	2002	2005	2008	2011	2014	2015	2017
Point (Tons/Year) *	30,850.43	25,237.47	63,184.04	64,254.04	65,401.66	66,512.50	66,882.78	67,590.87
Area (Tons/Year)	184,125.74	186,748.59	195,132.88	203,263.30	211,525.98	219,584.84	222,202.47	227,463.10
On-Road (Tons/Day) **	1,801.72	1,935.13	2,327.33	1,987.96	1,896.95	1,832.70	1,808.67	1,824.95

NOx	2001	2002	2005	2008	2011	2014	2015	2017
Point (Tons/Year) *	17,263.27	15,606.80	37,618.03	37,947.67	38,290.32	38,614.84	38,722.94	38,918.61
Area (Tons/Year)	31,822.89	31,665.83	31,555.39	31,043.87	30,622.93	30,660.63	30,756.97	31,044.91
On-Road (Tons/Day) **	160.57	161.19	181.55	145.70	117.38	90.91	84.96	82.75

PM10	2001	2002	2005	2008	2011	2014	2015	2017
Point (Tons/Year) *	7,418.19	6,818.33	14,436.83	14,612.90	14,779.78	14,938.94	14,991.99	15,077.57
Area (Tons/Year)	16,314.20	16,231.96	16,347.93	16,595.09	16,974.18	17,365.87	17,484.59	17,692.48
On-Road (Tons/Day) **	51.30	52.33	71.02	75.85	81.16	90.00	104.84	105.38

SOx	2001	2002	2005	2008	2011	2014	2015	2017
Point (Tons/Year) *	8,884.91	6,048.77	35,494.35	35,550.44	35,607.07	35,659.65	35,677.17	35,703.41
Area (Tons/Year)	2,134.56	2,149.09	2,219.34	2,294.93	2,370.11	2,441.92	2,465.20	2,510.63
On-Road (Tons/Day) **	5.32	5.46	7.29	7.43	8.04	8.63	8.83	8.83

VOC	2001	2002	2005	2008	2011	2014	2015	2017
Point (Tons/Year) *	5,309.57	5,183.67	8,034.87	8,206.38	8,379.58	8,545.44	8,600.73	8,696.39
Area (Tons/Year)	150,738.67	150,585.37	151,664.80	153,339.12	156,232.05	159,330.42	160,290.66	162,032.65
On-Road (Tons/Day) **	89.16	89.44	88.80	71.74	60.37	51.39	49.96	49.77

* Point source totals for 2001 & 2002 include slight variations between specific episode days.
The numbers reported in this table reflect the highest number for each pollutant.
Banked emissions are included in all projection year inventories (2005 forward).

** On-Road source totals for every year include slight variations between specific episode days.
The numbers reported in this table reflect the episode day on which the NOx and the PM10 were the highest.

More detail concerning any element of the inventory can be found at the appropriate section of the Technical Support Document (TSD). More detail about the general construction of the inventory may be found in the Inventory Preparation Plan at Section 1.a of the TSD. Discussion concerning any adjustments that were made to the inventoried emissions prior to use in the UAM-AERO model may be found in the modeling section of the TSD.

(3) Emissions Limitations

As discussed above, there was a distinction made in the modeling of projected emissions for the point source category. The larger sources within the modeling domain were modeled at their maximum allowable emissions, as determined on a short-term basis.

A subset of these "large" sources was subsequently identified for the purpose of establishing emission limitations as part of the Utah SIP. This subset includes any large source located within any of the three current nonattainment areas for PM_{10}: Salt Lake County, Utah County, or Ogden City. A source was also included in the subset if it was currently regulated for PM_{10} under

section IX, Part H of the Utah SIP. There were several sources in Davis County that were close enough to the border so as to have originally been included in the original PM_{10} SIP.

As discussed before, the emission limits for these sources had already been reflected in the projected emissions inventories used in the modeling analysis. Many of these limits appear in State issued Approval Orders or Title V Operating Permits. Such regulatory documents typically include many emission limits and operating restrictions. Only those limits that are truly significant from an airshed management perspective have been incorporated specifically into the SIP.

These limits are incorporated in the Utah SIP at Section IX, Part H (formerly Sections 1 and 2 of Appendix A to Section IX, Part A), and as such remain federally enforceable.

These conditions demonstrate maintenance through 2017.

(4) Emission Reduction Credits

Existing Emission Reduction Credits on file with the Utah Division of Air Quality were included in the modeled demonstration of maintenance outlined in Subsection IX.A.10.c(1). Concerning the subsequent banking of any emission reduction credits for PM_{10}, or precursors thereto, the emission levels contained in the modeled demonstration of maintenance outlined in Subsection IX.A.10.c(1), or incorporated into the Utah SIP at Section IX, Part H (formerly Appendix A to Section IX, Part A,) should serve to establish a baseline for the emission rates relied upon by this maintenance plan. These emission reduction credits, whether pre-existing or established subsequent to the approval of this SIP revision, are allowed to the extent that they are established by actual, verifiable, and enforceable reductions in emissions.

(5) Additional Controls for Future Years

Since these emission limitations remain federally enforceable and have been sufficient to ensure continued attainment of the PM_{10} NAAQS, there is no need to require any additional control measures to maintain the PM_{10} NAAQS.

(6) Mobile Source Budget for Purposes of Conformity

The transportation conformity provisions of section 176(c)(2)(A) of the Clean Air Act (CAA) require regional transportation plans and programs to show that "...emissions expected from implementation of plans and programs are consistent with estimates of emissions from motor vehicles and necessary emissions reductions contained in the applicable implementation plan..." EPA's transportation conformity regulation (40 CFR 93.118, last amended at 69 FR 40072, July 1, 2004) also requires that motor vehicle emission budgets must be established for the last year of the maintenance plan, and may be established for any years deemed appropriate. If the maintenance plan does not establish motor vehicle emissions budgets for any years other than the last year of the maintenance plan, the conformity regulation requires that a "demonstration of consistency with the motor vehicle emissions budgets must be accompanied by a qualitative finding that there are not factors which would cause or contribute to a new violation or exacerbate an existing violation in the years before the last year of the maintenance plan." The normal

interagency consultation process required by the regulation shall determine what must be considered in order to make such a finding.

Road dust projections were estimated using the EPA PART5 particulate emissions model. However, prior to applying these emission estimates in an attainment demonstration using the UAM-AERO model, the road dust inventory was discounted by 75% as part of the attainment modeling method to more accurately reflect the conventional understanding of the relationship of modeled road dust emissions and actual fugitive dust measurements recorded by the State air quality monitoring network. The mobile source budgets set forth in this Plan for direct PM_{10} (including road dust) are based on the unmodified estimates from the PART5 model, and as such, no discount adjustments should be applied as part of the regional emissions analysis for future conformity determinations.

For transportation plan analysis years after the last year of the maintenance plan (in this case 2017), a conformity determination must show that emissions are less than or equal to the maintenance plan's motor vehicle emissions budget(s) for the last year of the implementation plan.

Mobile sources are not significant contributors of SO_2. This SIP does not establish a motor vehicle emissions budget for SO_2.

(a) Salt Lake County Mobile Source PM_{10} Emissions Budgets

In this maintenance plan, the State is establishing transportation conformity motor vehicle emission budgets (MVEB) for 2015 and 2017.

(i) Direct PM_{10} Emissions Budget

As presented in the Technical Support Document (SMOKE Formats for Urban Counties), estimated on-road mobile source emissions for Salt Lake County, in 2015 and 2017, of direct sources of PM_{10} (road dust, brake wear, tire wear, and exhaust particles) were **48.86** tons per winter weekday. The maintenance demonstration in Subsection IX.A.10.c.(1) estimates a maximum PM_{10} concentration of **147.7** ug/m^3 in 2017 within the Salt Lake County portion of the modeling domain. This value is **2.3** ug/m^3 below the NAAQS of 150 ug/m^3.

EPA's conformity regulation (40 CFR 93.124) also allows the implementation plan to quantify explicitly the amount by which motor vehicle emissions could be higher while still demonstrating compliance with the maintenance requirement. The implementation plan can then allocate some or all of this additional "safety margin" to the emissions budgets for transportation conformity purposes. In this case, the safety margin equates to **2.3** ug/m^3.

[Editorial Note: Inclusion of the following paragraph in the document to be proposed for public comment depends on the results of the modeling analysis described therein. The results of this analysis were not known at the time this document was mailed to the UAQB members, but will be known by the time of the UAQB meeting. Should the model results show that the area would still be maintaining the PM_{10} standard using the expanded MVEB, Alternative 1 would be included.]

Alternative 1. Using the same emission projections for point and area and non-road mobile sources, the UAM-AERO model was re-run using 52 tons of PM_{10} per winter weekday for mobile sources (and 35 tons/winter weekday of NO_X). The revised maintenance demonstration for 2015

*and 2017 still shows maintenance of the PM_{10} standard. It estimates a maximum PM_{10} concentration of **148.5 ug/m^3** in 2017 within the Salt Lake County portion of the modeling domain. This value is **1.5 ug/m^3** below the NAAQ Standard of 150 ug/m^3. This maintenance plan allocates **0.8 ug/m^3** of the safety margin to the transportation MVEB, and thereby sets the direct PM_{10} MVEB for 2015 and 2017 at **52** tons/winter weekday.*

[Should the modeling results indicate otherwise, Alternative 2 would replace Alternative 1.]

***Alternative 2.** This maintenance plan sets the direct PM_{10} MVEB for 2015 and 2017 at **49** tons/winter weekday.*

Mobile sources are not significant contributors of direct SO_4 exhaust particulates. This SIP does not establish a separate MVEB for SO_4.

(ii) NO_X Emissions Budget

NO_X emissions indirectly contribute to PM_{10} concentrations through secondary chemical reactions and for this reason are sometimes referred to as indirect or secondary PM_{10}. As presented in the TSD (SMOKE Formats for Urban Counties), estimated on-road mobile source NO_X emissions in 2015 and 2017 were **34.96** tons per winter weekday. The maintenance demonstration in Subsection IX.A.10.c(1) estimates a maximum PM_{10} concentration of **147.7** ug/m^3 in 2017 within the Salt Lake County portion of the modeling domain. This value is **2.3** ug/m^3 below the NAAQS of 150 ug/m3.

EPA's conformity regulation (40 CFR 93.124) also allows the implementation plan to quantify explicitly the amount by which motor vehicle emissions could be higher while still demonstrating compliance with the maintenance requirement. The implementation plan can then allocate some or all of this additional "safety margin" to the emissions budgets for transportation conformity purposes. In this case, the safety margin equates to **2.3** ug/m^3.

[Editorial Note: Inclusion of the following paragraph in the document to be proposed for public comment depends on the results of the modeling analysis described therein. The results of this analysis were not known at the time this document was mailed to the UAQB members, but will be known by the time of the UAQB meeting. Should the model results show that the area would still be maintaining the PM_{10} standard using the expanded MVEB, Alternative 1 would be included.]

***Alternative 1.** Using the same emission projections for point and area and non-road mobile sources, the UAM-AERO model was re-run using 35 tons of NO_X per winter weekday for mobile sources (and 52 tons/winter weekday of PM_{10}). The revised maintenance demonstration for 2015 and 2017 still shows maintenance of the PM_{10} standard. It estimates a maximum PM_{10} concentration of **148.5 ug/m^3** in 2017 within the Salt Lake County portion of the modeling domain. This value is **1.5 ug/m3** below the NAAQS of 150 ug/m^3. This maintenance plan allocates **0.8 ug/m^3** of the safety margin to the transportation MVEB, and thereby sets the NO_X MVEB for 2015 and 2017 at 35 tons/winter weekday.*

[Should the modeling results indicate otherwise, Alternative 2 would replace Alternative 1.]

Alternative 2. This maintenance plan sets the NO_X MVEB for 2015 and 2017 at 35 tons/winter weekday.

(b) Ogden City Mobile Source PM_{10} Emissions Budgets

In this maintenance plan, the State is establishing transportation conformity motor vehicle emission budgets (MVEB) for 2015 and 2017.

(i) Direct PM_{10} Emissions Budget

As presented in the TSD (Ogden City SMOKE Formats), estimated on-road mobile source emissions in 2015 and 2017 of primary sources of PM_{10} (road dust, brake wear, tire wear, and exhaust particles) were **3.10** tons per winter weekday. The maintenance demonstration in Subsection IX.A.10.c(1) estimates a maximum PM_{10} concentration of **122.3** ug/m^3 in 2017 within the Ogden City portion of the modeling domain. This is **27.7** ug/m^3 below the NAAQS of 150 ug/m^3.

EPA's conformity regulation (40 CFR 93.124) also allows the implementation plan to quantify explicitly the amount by which motor vehicle emissions could be higher while still demonstrating compliance with the maintenance requirement. The implementation plan can then allocate some or all of this additional "safety margin" to the emissions budgets for transportation conformity purposes. In this case, the safety margin equates to **27.7** ug/m^3.

[Editorial Note: Inclusion of the following paragraph in the document to be proposed for public comment depends on the results of the modeling analysis described therein. The results of this analysis were not known at the time this document was mailed to the UAQB members, but will be known by the time of the UAQB meeting. Should the model results show that the area would still be maintaining the PM_{10} standard using the expanded MVEB, Alternative 1 would be included.]

Alternative 1. *Using the same emission projections for point and area and non-road mobile sources, the UAM-AERO model was re-run using 4 tons of PM_{10} per winter weekday for mobile sources (and 2 tons/winter weekday of NO_X). The revised maintenance demonstration for 2015 and 2017 still shows maintenance of the PM_{10} standard. It estimates a maximum PM_{10} concentration of 133.2 ug/m^3 in 2017 within the Ogden City portion of the modeling domain. This value is 16.8 ug/m^3 below the NAAQS of 150 ug/m^3. This maintenance plan allocates 10.9 ug/m^3 of the safety margin to the transportation MVEB, and thereby sets the direct PM_{10} MVEB for 2015 and 2017 at 4 tons/winter weekday.*

[Should the modeling results indicate otherwise, Alternative 2 would replace Alternative 1.]

Alternative 2. *This maintenance plan sets the direct PM_{10} MVEB for 2015 and 2017 at 3 tons/winter weekday.*

Mobile sources are not significant contributors of direct SO_4 exhaust particulates. This SIP does not establish a separate MVEB for SO_4.

(ii) NO_X Emissions Budget

NOx emissions indirectly contribute to PM_{10} concentrations through secondary chemical reactions and for this reason are sometimes referred to as indirect or secondary PM_{10}. As presented in the TSD (Ogden City SMOKE Formats), estimated on-road mobile source NO_X emissions in 2015 and 2017 were **1.85** tons per winter weekday. The maintenance demonstration in Subsection IX.A.10.c(1) estimates a maximum PM_{10} concentration of **122.3** ug/m^3 in 2017 within the Ogden City portion of the modeling domain. This is **27.7** ug/m^3 below the NAAQS of 150 ug/m^3.

EPA's conformity regulation (40 CFR 93.124) also allows the implementation plan to quantify explicitly the amount by which motor vehicle emissions could be higher while still demonstrating compliance with the maintenance requirement. The implementation plan can then allocate some or all of this additional "safety margin" to the emissions budgets for transportation conformity purposes. In this case, the safety margin equates to **27.7** ug/m^3.

[Editorial Note: Inclusion of the following paragraph in the document to be proposed for public comment depends on the results of the modeling analysis described therein. The results of this analysis were not known at the time this document was mailed to the UAQB members, but will be known by the time of the UAQB meeting. Should the model results show that the area would still be maintaining the PM_{10} standard using the expanded MVEB, Alternative 1 would be included.]

Alternative 1. *Using the same emission projections for point and area and non-road mobile sources, the UAM-AERO model was re-run using 2 tons of NO_X per winter weekday for mobile sources (and 4 tons/winter weekday of PM_{10}). The revised maintenance demonstration for 2015 and 2017 still shows maintenance of the PM_{10} standard. It estimates a maximum PM_{10} concentration of **133.2 ug/m^3** in 2017 within the Ogden City portion of the modeling domain. This value is **16.8 ug/m^3** below the NAAQ Standard of 150 ug/m3. This maintenance plan allocates **10.9 ug/m^3** of the safety margin to the transportation MVEB, and thereby sets the NO_X MVEB for 2015 and 2017 at 2 tons/winter weekday.*

[Should the modeling results indicate otherwise, Alternative 2 would replace Alternative 1.]

Alternative 2. *This maintenance plan sets the NO_X MVEB for 2015 and 2017 at 2 tons/winter weekday.*

(c) Utah County Mobile Source PM_{10} Emissions Budgets (Tons per winter day, for 2017 and beyond)

Upon the approval of this Maintenance Plan by EPA, the previously approved Utah County Mobile Source budgets for years 2010 and 2020 will be considered withdrawn and will no longer apply, and these new MVEB will take effect for future transportation conformity determinations.

The MVEB of 25 tpd of direct PM_{10} (road dust, brake wear, tire wear, and exhaust particles) and 23 tpd of NO_X for 2017 and beyond will be used to determine whether plans, programs, and projects comply with the Maintenance Plan in applicable horizon years.

(i) Direct PM_{10} MVEB

As presented in the TSD (SMOKE Formats for Urban Counties), estimated on-road mobile source emissions in 2017 of direct PM_{10} (road dust, brake wear, tire wear, and exhaust particles) were **23.63** tons per winter weekday. The maintenance demonstration in Subsection IX.A.10.c(1) estimates a maximum PM_{10} concentration of **128.6** ug/m^3 in 2017 within the Utah County portion of the modeling domain. This concentration is **21.4** ug/m^3 below the NAAQ Standard of 150 ug/m^3.

EPA's conformity regulation (40 CFR 93.124) also allows the implementation plan to quantify explicitly the amount by which motor vehicle emissions could be higher while still demonstrating compliance with the maintenance requirement. The implementation plan can then allocate some or all of this additional "safety margin" to the emissions budgets for transportation conformity purposes. In this case, the safety margin equates to **21.4** ug/m^3.

[Editorial Note: Inclusion of the following paragraph in the document to be proposed for public comment depends on the results of the modeling analysis described therein. The results of this analysis were not known at the time this document was mailed to the UAQB members, but will be known by the time of the UAQB meeting. Should the model results show that the area would still be maintaining the PM_{10} standard using the expanded MVEB, Alternative 1 would be included.]

Alternative 1. *Using the same emission projections for point and area and non-road mobile sources, the UAM-AERO model was re-run using 25 tons of PM_{10} per winter weekday for mobile sources (and 23 tons/winter weekday of NO_X). The revised maintenance demonstration for 2017 still shows maintenance of the PM_{10} standard. It estimates a maximum PM_{10} concentration of* ***130.7 ug/m^3*** *in 2017 within the Utah County portion of the modeling domain. This value is* ***19.3 ug/m^3*** *below the NAAQS of 150 ug/m^3. This maintenance plan allocates* ***2.1 ug/m^3*** *of the safety margin to the transportation MVEB, and thereby sets the direct PM_{10} MVEB for 2017 at 25 tons/winter weekday.*

[Should the modeling results indicate otherwise, Alternative 2 would replace Alternative 1.]

Alternative 2. *This maintenance plan sets the direct PM_{10} MVEB for 2017 at 24 tons/winter weekday.*

Mobile sources are not significant contributors of direct SO_4 exhaust particulates. This SIP does not establish a MVEB for SO_4.

(ii) NO_X MVEB

As presented in the TSD (SMOKE Formats for Urban Counties), estimated on-road mobile source emissions in 2017 of NO_X were **20.7** tons per winter weekday. The maintenance demonstration in Subsection IX.A.10.c(1) estimates a maximum PM_{10} concentration of **128.6** ug/m^3 for 2017 within the Utah County portion of the modeling domain. This is **21.4** ug/m^3 below the NAAQS of 150 ug/m^3.

EPA's conformity regulation (40 CFR 93.124) also allows the implementation plan to quantify explicitly the amount by which motor vehicle emissions could be higher while still demonstrating compliance with the maintenance requirement. The implementation plan can then allocate some

or all of this additional "safety margin" to the emissions budgets for transportation conformity purposes. In this case, the safety margin equates to **21.4** ug/m^3.

> ***[Editorial Note: Inclusion of the following paragraph in the document to be proposed for public comment depends on the results of the modeling analysis described therein. The results of this analysis were not known at the time this document was mailed to the UAQB members, but will be known by the time of the UAQB meeting. Should the model results show that the area would still be maintaining the PM_{10} standard using the expanded MVEB, Alternative 1 would be included.]***

Alternative 1. *Using the same emission projections for point and area and non-road mobile sources, the UAM-AERO model was re-run using* ***23*** *tons of NO_X per winter weekday for mobile sources (and 25 tons/winter weekday of PM_{10}). The revised maintenance demonstration for 2017 still shows maintenance of the PM_{10} standard. It estimates a maximum PM_{10} concentration of* ***130.7 ug/m^3*** *in 2017 within the Utah County portion of the modeling domain. This value is* ***19.3 ug/m^3*** *below the NAAQ Standard of 150 ug/m3. This maintenance plan allocates* ***2.1 ug/m^3*** *of the safety margin to the transportation MVEB, and thereby sets the NO_X MVEB for 2017 at 23 tons/winter weekday.*

> ***[Should the modeling results indicate otherwise, Alternative 2 would replace Alternative 1.]***

Alternative 2. *This maintenance plan sets the* NO_X *MVEB for 2017 at 21 tons/winter weekday.*

(d) Net Effect to Maintenance Demonstration

Using the procedure described above, some of the safety margin indicated earlier in Subsection IX.A.10.c.(1) has been allocated to the mobile vehicle emissions budgets. The results of this modification are presented below.

(i) Inventory: The emissions inventory was adjusted by adding:

in 2015:	4.04 ton/day	PM_{10}	and	0.19 ton/day NO_X
in 2017:	5.41 ton/day	PM_{10}	and	2.49 ton/day NO_X

(ii) Modeling:

The effect on the modeling results throughout the domain is summarized in the following table (which shows predicted concentrations in ug/m^3). It demonstrates that with the allocation of the safety margin, the NAAQS is still maintained through 2017 in all areas.

2001 Base Year Episode	2005	2008	2011	2014	2015	2017	Plus Safety Margin 2015	Plus Safety Margin 2017
Cottonwood	91.45	89.13	88.57	89.92	93.40	93.69	95.35	95.62
Hawthorne	124.17	121.71	119.76	120.84	125.60	125.97	127.95	128.32
Magna	81.33	80.32	80.11	80.52	80.44	81.91	82.24	82.54
N. Salt Lake	144.05	143.07	142.96	144.37	147.27		148.09	
Ogden	113.19	113.04	113.75	116.62	121.75		133.20	
Lindon	78.82	81.00	82.97	84.79	90.16	90.35	91.95	92.14
N. Provo	62.04	62.22	63.50	65.11	69.68	69.87	71.45	71.68

2002 Base Year Episode	2005	2008	2011	2014	2015	2017	Plus Safety Margin 2015	Plus Safety Margin 2017
Cottonwood	132.83	125.45	121.54	121.08	124.04	125.23	125.38	126.56
Hawthorne	136.60	127.78	122.80	122.03	125.35	126.61	126.73	127.98
Magna	93.92	94.03	95.34	96.73	96.00	98.47	96.60	99.07
N. Salt Lake	148.77	139.92	134.87	133.19	136.01	137.27	137.41	138.65
Peak Cell (near Cottonwood)	149.97	140.36	134.92	133.85	137.43	138.75	139.08	140.39
Ogden	117.70	116.09	116.02	117.59	121.20	122.12	126.60	127.51
Lindon	131.09	126.27	124.12	123.87	127.71		129.79	
N. Provo	122.46	118.22	116.74	117.34	121.60	122.34	123.58	124.31

(7) Nonattainment Requirements Applicable Pending Plan Approval

CAA 175A(c) - *Until such plan revision is approved and an area is redesignated as attainment, the requirements of CAA Part D, Plan Requirements for Nonattainment Areas, shall remain in force and effect.* The Clean Air Act requires the continued implementation of the nonattainment area control strategy unless such measures are shown to be unnecessary for maintenance or are replaced with measures that achieve equivalent reductions. Utah will continue to implement the emissions limitations and measures from the PM_{10} SIP.

(8) Revise in Eight Years

CAA 175A(b) - *Eight years after redesignation, the State must submit an additional plan revision which shows maintenance of the applicable NAAQS for an additional 10 years.* Utah agrees to fulfill this obligation at the appropriate point in time.

(9) Verification of Continued Maintenance

Implicit in the requirements outlined above is the need for the State to determine whether the area is in fact maintaining the standard it has achieved. There are two complementary ways to measure this: 1) by monitoring the ambient air for PM_{10}, and 2) by inventorying emissions of PM_{10} and its precursors from varioius sources.

The State will continue to maintain an ambient monitoring network for PM_{10} in accordance with 40 CFR Part 58 and the Utah SIP. The State anticipates that the EPA will continue to review the ambient monitoring network for PM_{10} each year, and any necessary modifications to the network will be implemented.

The State will also continue to collect actual emissions inventory data from all sources of PM_{10}, SO_2, and NO_X in excess of 25 tons (in aggregate) per year, as required by R307-150.

(10) Contingency Measures

CAA 175A(d) - Each maintenance plan shall contain contingency measures to assure that the State will promptly correct any violation of the standard which occurs after the redesignation of the area to attainment. Such provisions shall include a requirement that the State will implement all control measures which were contained in the SIP prior to redesignation. Utah has implemented all measures contained in the plan, and will continue to do so even after redesignation. This revision need only address such contingency measures as may be necessary to mitigate any future violation of the standard.

The State will rely upon ambient PM_{10} monitoring to determine whether a violation has occurred. Upon monitoring a violation of the PM_{10} NAAQS, the State will take the following actions.

- The State will identify the source(s) of PM_{10} causing the violation, and report the situation to EPA Region VIII within four months.

- The State will identify a means of corrective action within six months. The maintenance plan contingency measures to be considered and selected will be chosen from the following list or any other emission control measures deemed appropriate based on a consideration of cost-effectiveness, emission reduction potential, economic and social considerations, or other factors that the State deems appropriate:

  - Re-evaluate the thresholds at which a red or yellow burn day is triggered, as established in R307-302;

  - Further controls on stationary sources;

  - Expand the road salting and sanding program in R307-307 to include Weber County.

The State will require implementation of such corrective action no later than one year after the violation was confirmed.

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INFORMATIONAL ITEMS

State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

DAQ-009-2005

MEMORANDUM

TO: Utah Air Quality Board

THROUGH: Richard W. Sprott, Executive Secretary

THROUGH: Cheryl Heying, Planning Branch Manager

THROUGH: Dave McNeill, SIP Branch Manager

FROM: Mat Carlile, Assistant Rules Coordinator

DATE: February 18, 2005

SUBJECT: Propose for Public Comment: Amend R307-101-2, R307-165, R307-201, R307-204, R307-205, R307-206, R307-302, R307-305, and R307-310; New Rules R307-207 and R307-306

Background:

In another part of this packet, you received a maintenance plan for the PM_{10} nonattainment areas along the Wasatch Front. The maintenance plan relies, in part, on the suite of control strategies developed during the 1980's and 1990's to reduce particulate emissions in nonattainment areas. These strategies, such as opacity standards and fugitive dust controls, need to remain in place when Salt Lake County, Utah County and Ogden City are redesignated to attainment to ensure that air quality does not degrade in these areas. Because many of the requirements currently apply only to PM_{10} nonattainment areas, we are proposing a revision to the attached rules to ensure that the requirements will continue to apply in PM_{10} maintenance areas.

In addition, we cleaned up the rules to remove outdated requirements and make requirements easier to find and to understand. Some substantive changes were made as part of this clean up. These specific changes are identified in the next section of the memo.

After initially developing these rules, we held a stakeholder meeting in November 2004 to review the proposed changes and to seek comments about them. Following that stakeholder, meeting we sent out an email to the stakeholders inviting them to review the rules on our website and to provide comments about the proposed changes. Those comments have been incorporated into the present proposal.

We have prepared draft rule changes to keep the PM_{10} nonattainment area requirements when the areas are redesignated to attainment. In addition, we reviewed the rules to determine whether all of the provisions are still needed and are achieving the desired effect. The following general changes were made to the rules:

1. Wherever the term nonattainment area was used, the term maintenance area was added if the emission standards or work practices are still needed to reduce PM_{10} emissions.

2. A 180-day compliance schedule was added for sources in any new PM_{10} nonattainment areas so they will have time to make changes to their processes or to add control equipment to meet the requirements.

3. Some rules connected with the Utah SIP were not appropriate to apply to rural areas of the state outside of the nonattainment and maintenance areas (Davis, Salt Lake, Weber, and Utah Counties). Further, it is generally not necessary to seek EPA approval of rules affecting rural areas. In the attached draft, the R307-200 series of the rules will apply only to the rural areas of the State and will not be sent to EPA for its approval, and the R307-300 series of the rules will apply to nonattainment and maintenance areas and will be submitted to EPA for its approval as part of the PM_{10} maintenance plan.

Staff Recommendation:

We recommend the attached rules be proposed for public comment.

The following rules apply statewide:

R307-101-2. Definitions:

- **Actual area of nonattainment:** deleted because this term was originally used to distinguish Total Suspended Particulate (TSP) areas that were actually violating the standard from the broader area (entire county) that was designated nonattainment. There were maps included in the SIP that showed the *actual area of nonattainment* for TSP. In the early 1990's the PM_{10} air standard replaced the TSP air standard, the PM_{10} SIP replaced the TSP SIP, and there was no longer a distinction between these terms. The continued use of this term in our rules is confusing, and we are proposing it be replaced by the term *nonattainment area* throughout the rules.

- **EPA Method 9:** added to simplify the rules because the full reference will not be needed each time the phrase is used. EPA Method 9 is used to measure opacity.

- **Maintenance area:** added this definition to include a list of current maintenance areas. As new areas are redesignated to attainment under the provisions of a maintenance plan, the definition will be modified to include the new areas.

- **Nonattainment area:** changed to refer to EPA's designation process. The official designations for all areas in Utah can be found in 40 CFR 81.345.

- **PM_{10} nonattainment area:** deleted because the backsliding provisions will now be addressed with the new term, *maintenance area.*

- **PM_{10} Particulate Matter**: changed to **PM_{10}**. The term *PM_{10}* is used throughout the rules, and the term *PM_{10} particulate matter* is only used in a few places.

- **PM_{10} Precursor:** changed to remove specific reference to sulfur dioxide and nitrogen oxides to avoid implication that there were no other PM_{10} precursors to consider.

- **Road:** moved the definition of *road* to R307-101-2 rather than repeating the definition in other rules.

R307-165. Emission Testing.

We removed duplicate and outdated requirements. In addition, the requirement to test new sources within 6 months of startup was removed because it is more appropriate to establish the initial testing schedule in the Approval Order.

The following rules apply in all areas of the state outside of the nonattainment and maintenance areas:

R307-201. General Emission Standards

This rule was rewritten to apply only in areas outside of nonattainment and maintenance areas (Davis, Salt Lake, Utah, and Weber Counties). A separate rule, R307-305, establishes emission standards for PM_{10} nonattainment and maintenance areas. In addition, language was removed that exempted gasoline powered engines from opacity limitations for the first 100 yards for mobile sources and for 3 minutes of every hour for a stationary source. This exemption should not be needed for these types of engines if they are maintained and operated properly. Also, language that allows an exception to opacity standards, upon approval by the Board, for diesel locomotives operating above 6000 feet was removed because we could not find the origin of this provision, nor a reason to keep it.

R307-204-3. (Emission Standards: Smoke Management) Definitions

The term *maintenance area* was removed because this term is now defined in the R307-101-2. No other changes were made to the rule.

R307-205. Emission Standards: Fugitive Emissions and Fugitive Dust

- This rule was rewritten to apply only in attainment areas. In addition, outdated language was removed that required mining and tailings operations in nonattainment areas to submit a fugitive dust plan by 1981. Updated requirements for fugitive dust plans in nonattainment areas can be found in R307-309.
- We removed provisions in R307-205-6 that require control measures for unpaved roads based on the number of vehicle trips per day. These requirements were established as part of the Total Suspended Particulate (TSP) plan in 1982. Other requirements, such as fugitive dust plans and AO conditions, address fugitive dust emissions from haul roads and this was the primary target for the original provision. The rule has never been applied to rural roads in general and could be misinterpreted. Therefore, DAQ staff recommend removal of this requirement from R307-205.

R307-206. Emission Standards: Abrasive Blasting.

This rule was rewritten to clarify the existing requirements because the current rule is very difficult to understand. The requirements for nonattainment and maintenance areas were moved into a new rule, R307-306.

R307-207. Emission Standards: Residential Fireplaces and Stoves.

The requirements for residential fireplaces and stoves outside nonattainment and maintenance areas were moved from R307-201 into this new rule to make them easier to find.

The following rules apply to only nonattainment and maintenance areas:

R307-302. Davis, Salt Lake, Utah, Weber Counties: Residential Fireplaces and Stoves.

This rule has been changed to formalize the woodburning control program that has been implemented on a voluntary basis in Weber County and parts of Davis County. We included the woodburning program in the PM_{10} modeling as an important part of our attainment demonstration. By using this control strategy, we can more effectively document the emissions reductions that we have achieved from this program. It is not anticipated that this change will be a significant issue for the residents of these areas because the program has already been successfully implemented as a voluntary measure in these areas for a number of years. Residents in these areas will have until November 2006 to register their stoves as a sole source of heat if they qualify.

R307-305. Nonattainment and Maintenance Areas for PM_{10}: Emission Standards.

R307-305-2 contained explanatory language regarding emission levels needed to attain the PM_{10} standard. This language was moved to the new purpose statement because it was not intended to establish any new standards, but was rather intended to show how the SIP limitations met the CAA requirements.

Compliance schedule requirements for implementing the PM_{10} SIP were removed because these actions have already been completed for a number of years. A new section was added establishing a compliance schedule for any new PM_{10} nonattainment areas. The provisions in this rule would apply 180 days after a new area is designated nonattainment for PM_{10} in 40 CFR 81.345.

All of the TSP requirements that now only apply in Weber County were deleted, including source-specific limitations and compliance schedules that were originally developed for TSP nonattainment areas. These provisions had been kept in place to prevent backsliding when the PM_{10} standard was promulgated. All of the listed sources in Weber County have either shut down or have received an approval order that covers their emissions; therefore, these rule provisions are no longer necessary to prevent backsliding.

Finally, some language from R307-201 was added to this rule. This was necessary because R307-201 will no longer apply in the nonattainment and maintenance areas.

R307-307. Nonattainment and Maintenance Areas for PM_{10}: Road Salting and Sanding.

The provisions of this rule will remain in place when these areas are redesignated to attainment because the rule, as written, refers to the specific counties rather than to nonattainment areas. No changes are needed to address the backsliding issue. Therefore, no draft of this rule will be provided.

R307-309. Nonattainment and Maintenance Areas for PM_{10}: Fugitive Emissions and Fugitive Dust.

- We removed language that delayed the applicability of this rule for sources with operating permits until the renewal date of the permit. When this rule was originally developed, we provided a 5-year "phase in" to avoid unnecessarily reopening operating permits.

- Language requiring existing sources to update their fugitive dust plans by May 4, 1999 was removed because that compliance date was 5 years ago.

- We reworded exemptions to address EPA's concerns. Specifically, we deleted exemptions related to R307-305 and reworded exemptions for R307-307 to only exempt activities related to R307-307. In addition, the 25 mph exemption for controlling fugitive dust has been modified to 30 mph to match the language in Utah's Natural Events Plan.

- Language regulating mining activities and tailing piles and ponds that is currently found in R307-205 was added to this rule because R307-205 will no longer apply to PM_{10} nonattainment or maintenance areas.

- The track-out provision was consolidated from two sections into one section to reduce redundancy in the rule.

- We modified the format of R307-309-5 –3 (now section 5) to match other sections and help with readability.

- We removed provisions in R307-309-7 that require control measures for unpaved roads based on the number of vehicle trips per day. These requirements were established as part of the Total Suspended Particulate (TSP) plan in 1982. The TSP plan assumed a high number of unpaved roads affecting non-attainment areas for TSP.

  However, our research with the local MPO's has indicated that currently there are few unpaved roads in the populated areas along the Wasatch Front. Additionally, PM_{10} non-attainment areas were established on county level and these counties are larger than the urban areas where PM_{10} problem occurred. Therefore, the effect of these provisions is centered in the rural areas of these counties that do not influence PM_{10} levels in the urban areas.

  Also, as our focus changed from TSP to PM_{10} it became apparent that the PM_{10} problem is more related to winter inversions when dust is insignificant. This becomes even more apparent as we look at future $PM_{2.5}$ issues. Summertime PM_{10} problems are primarily due to wind events, not dust emissions from unpaved roads.

  Finally, industrial sources within the non-attainment areas with unpaved roads such as haul roads are subject to permitting and BACT requirements. These requirements are more specific to each source's situation and ultimately resolve the situations much better.

R307-310. Salt Lake County: Trading of Emission Budgets for Transportation Conformity.

R307-310 provides a mechanism to trade PM_{10} for NO_x to demonstrate conformity with Salt Lake County PM10 SIP. This rule was necessary because the PM10 SIP did not establish a conformity budget for Salt Lake County.

The conformity budgets in the new maintenance plan were developed using the latest transportation and mobile emission models. Because of improvements in the methods used to develop the proposed conformity budgets, it is no longer necessary to allow trading between the PM_{10} and NO_x budgets. The technical analysis for the proposed maintenance plan does not provide the information that would be needed to establish a trading ratio between pollutants.

New language was added to provide a mechanism to remove the trading option when EPA approves the new budget. We intend to seek deletion of R307-310 after EPA approves the new conformity budget as part of the new PM_{10} maintenance plan.

2-sided

AIR MONITORING

R307. Environmental Quality, Air Quality.
R307-101. General Requirements.
R307-101-2. Definitions.

Except where specified in individual rules, definitions in R307-101-2 are applicable to all rules adopted by the Air Quality Board.

~~["Actual Area of Nonattainment" means an area which is shown by monitored data or modeling actually to exceed the National Ambient Air Quality Standards (Boundaries are established in the Utah State Implementation Plan).~~

]"Actual Emissions" means the actual rate of emissions of a pollutant from an emissions unit determined as follows:

(1) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operations. The Executive Secretary shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(2) The Executive Secretary may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(3) For any emission unit, other than an electric utility steam generating unit specified in (4), which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(4) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the executive secretary, on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the executive secretary if the executive secretary determines such a period to be more representative of normal source post-change operations.

"Acute Hazardous Air Pollutant" means any noncarcinogenic hazardous air pollutant for which a threshold limit value - ceiling (TLV-C) has been adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and

Biological Exposure Indices, pages 15 - 72 (2000)."

"Air Contaminant" means any particulate matter or any gas, vapor, suspended solid or any combination of them, excluding steam and water vapors (Section 19-2-102(1)).

"Air Contaminant Source" means any and all sources of emission of air contaminants whether privately or publicly owned or operated (Section 19-2-102(2)).

"Air Pollution" means the presence in the ambient air of one or more air contaminants in such quantities and duration and under conditions and circumstances, as is or tends to be injurious to human health or welfare, animal or plant life, or property, or would unreasonably interfere with the enjoyment of life or use of property as determined by the standards, rules and regulations adopted by the Air Quality Board (Section 19-2-104).

"Air Quality Related Values" means, as used in analyses under R307-401-4(1), Public Notice, those special attributes of a Class I area, assigned by a federal Land Manager, that are adversely affected by air quality.

"Allowable Emissions" means the emission rate of a source calculated using the maximum rated capacity of the source (unless the source is subject to enforceable limits which restrict the operating rate, or hours of operation, or both) and the emission limitation established pursuant to R307-401-6.

"Ambient Air" means the surrounding or outside air (Section 19-2-102(4)).

"Appropriate Authority" means the governing body of any city, town or county.

"Asphalt or Asphalt Cement" means the dark brown to black cementitious material (solid, semisolid, or liquid in consistency) of which the main constituents are bitumens which occur naturally or as a residue of petroleum refining.

"Atmosphere" means the air that envelops or surrounds the earth and includes all space outside of buildings, stacks or exterior ducts.

"Authorized Local Authority" means a city, county, city-county or district health department; a city, county or combination fire department; or other local agency duly designated by appropriate authority, with approval of the state Department of Health; and other lawfully adopted ordinances, codes or regulations not in conflict therewith.

"Baseline Date":

(1) Major source baseline date means:

(a) In the case of particulate matter and sulfur dioxide, January 6, 1975, and

(b) In the case of nitrogen dioxide, February 8, 1988.

(2) Minor source baseline date means the earliest date

after the trigger date on which the first complete application under 40 CFR 52.21 or R307-405 is submitted by a major source or major modification subject to the requirements of 40 CFR 52.21 or R307-405. The minor source baseline is the date after which emissions from all new or modified sources consume or expand increment, including emissions from major and minor sources as well as any or all general commercial, residential, industrial, and other growth. The trigger date is:

(a) In the case of particulate matter and sulfur dioxide, August 7, 1977, and

(b) In the case of nitrogen dioxide, February 8, 1988.

"Best Available Control Technology (BACT)" means an emission limitation and/or other controls to include design, equipment, work practice, operation standard or combination thereof, based on the maximum degree or reduction of each pollutant subject to regulation under the Clean Air Act and/or the Utah Air Conservation Act emitted from or which results from any emitting installation, which the Air Quality Board, on a case-by-case basis taking into account energy, environmental and economic impacts and other costs, determines is achievable for such installation through application of production processes and available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall applications of BACT result in emissions of any pollutants which will exceed the emissions allowed by Section 111 or 112 of the Clean Air Act.

"Board" means Air Quality Board. See Section 19-2-102(6)(a).

"Breakdown" means any malfunction or procedural error, to include but not limited to any malfunction or procedural error during start-up and shutdown, which will result in the inoperability or sudden loss of performance of the control equipment or process equipment causing emissions in excess of those allowed by approval order or Title R307.

"BTU" means British Thermal Unit, the quantity of heat necessary to raise the temperature of one pound of water one degree Fahrenheit.

"Calibration Drift" means the change in the instrument meter readout over a stated period of time of normal continuous operation when the VOC concentration at the time of measurement is the same known upscale value.

"Carbon Adsorption System" means a device containing adsorbent material (e.g., activated carbon, aluminum, silica gel), an inlet and outlet for exhaust gases, and a system for the proper disposal or reuse of all VOC adsorbed.

"Carcinogenic Hazardous Air Pollutant" means any hazardous

air pollutant that is classified as a known human carcinogen (A1) or suspected human carcinogen (A2) by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Chargeable Pollutant" means any regulated air pollutant except the following:

(1) Carbon monoxide;

(2) Any pollutant that is a regulated air pollutant solely because it is a Class I or II substance subject to a standard promulgated or established by Title VI of the Act, Stratospheric Ozone Protection;

(3) Any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under Section 112(r) of the Act, Prevention of Accidental Releases.

"Chronic Hazardous Air Pollutant" means any noncarcinogenic hazardous air pollutant for which a threshold limit value - time weighted average (TLV-TWA) having no threshold limit value - ceiling (TLV-C) has been adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Clean Air Act" means federal Clean Air Act as amended in 1990.

"Clean Coal Technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

"Clean Coal Technology Demonstration Project" means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of $2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

"Clearing Index" means an indicator of the predicted rate of clearance of ground level pollutants from a given area. This number is calculated by the National Weather Service from daily measurements of temperature lapse rates and wind speeds from ground level to 10,000 feet. The State has been divided into three separate air quality areas for purposes of the clearing index system:

(1) Area 1 includes those valleys below 6500 feet above

sea level and west of the Wasatch Mountain Range and extending south through the Wasatch and Aquarius Plateaus to the Arizona border. Included are the Salt Lake, Utah, Skull and Escalante Valleys and valleys of the Sevier River Drainage.

(2) Area 2 includes those valleys below 6500 feet above sea level and east of the Wasatch Mountain Range. Included are Cache Valley, the Uintah Basin, Castle Valley and valleys of the Green, Colorado, and San Juan Rivers.

(3) Area 3 includes all valleys and areas above 6500 feet above sea level.

"Commence" as applied to construction of a major source or major modification means that the owner or operator has all necessary pre-construction approvals or permits and either has:

(1) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(2) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

"Compliance Schedule" means a schedule of events, by date, which will result in compliance with these regulations.

"Construction" means any physical change or change in the method of operation including fabrication, erection, installation, demolition, or modification of a source which would result in a change in actual emissions.

"Control Apparatus" means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere.

"Department" means Utah State Department of Environmental Quality. See Section 19-1-103(1).

"Electric Utility Steam Generating Unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

"Emission" means the act of discharge into the atmosphere of an air contaminant or an effluent which contains or may contain an air contaminant; or the effluent so discharged into the atmosphere.

"Emissions Information" means, with reference to any source operation, equipment or control apparatus:

(1) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics related to air quality of any air contaminant which has been emitted by the source operation, equipment, or control apparatus;

(2) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of any air contaminant which, under an applicable standard or limitation, the source operation was authorized to emit (including, to the extent necessary for such purposes, a description of the manner or rate of operation of the source operation), or any combination of the foregoing; and

(3) A general description of the location and/or nature of the source operation to the extent necessary to identify the source operation and to distinguish it from other source operations (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source operation).

"Emission Limitation" means a requirement established by the Board or the Administrator, EPA, which limits the quantity, rate or concentration of emission of air pollutants on a continuous emission reduction including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction (Section 302(k)).

"Emissions Unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act.

"Enforceable" means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the State Implementation Plan and R307, any permit requirements established pursuant to 40 CFR 52.21 or R307-401.

"EPA" means Environmental Protection Agency.

"EPA Method 9" means "Visual Determination of Opacity of Emissions from Stationary Sources," 40 CFR Part 60, Appendix A, effective July 1, 2004.

"Executive Director" means the Executive Director of the Utah Department of Environmental Quality. See Section 19-1-103(2).

"Executive Secretary" means the Executive Secretary of the Board.

"Existing Installation" means an installation, construction of which began prior to the effective date of any regulation having application to it.

"Facility" means machinery, equipment, structures of any

part or accessories thereof, installed or acquired for the primary purpose of controlling or disposing of air pollution. It does not include an air conditioner, fan or other similar device for the comfort of personnel.

"Fireplace" means all devices both masonry or factory built units (free standing fireplaces) with a hearth, fire chamber or similarly prepared device connected to a chimney which provides the operator with little control of combustion air, leaving its fire chamber fully or at least partially open to the room. Fireplaces include those devices with circulating systems, heat exchangers, or draft reducing doors with a net thermal efficiency of no greater than twenty percent and are used for aesthetic purposes.

"Fugitive Dust" means particulate, composed of soil and/or industrial particulates such as ash, coal, minerals, etc., which becomes airborne because of wind or mechanical disturbance of surfaces. Natural sources of dust and fugitive emissions are not fugitive dust within the meaning of this definition.

"Fugitive Emissions" means emissions from an installation or facility which are neither passed through an air cleaning device nor vented through a stack or could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"Garbage" means all putrescible animal and vegetable matter resulting from the handling, preparation, cooking and consumption of food, including wastes attendant thereto.

"Gasoline" means any petroleum distillate, used as a fuel for internal combustion engines, having a Reid vapor pressure of 4 pounds or greater.

"Hazardous Air Pollutant (HAP)" means any pollutant listed by the EPA as a hazardous air pollutant in conformance with Section 112(b) of the Clean Air Act. A list of these pollutants is available at the Division of Air Quality.

"Heavy Fuel Oil" means a petroleum product or similar material with a boiling range higher than that of diesel fuel.

"Household Waste" means any solid or liquid material normally generated by the family in a residence in the course of ordinary day-to-day living, including but not limited to garbage, paper products, rags, leaves and garden trash.

"Incinerator" means a combustion apparatus designed for high temperature operation in which solid, semisolid, liquid, or gaseous combustible wastes are ignited and burned efficiently and from which the solid and gaseous residues contain little or no combustible material.

"Indirect Source" means a building, structure or installation which attracts or may attract mobile source activity that results in emission of a pollutant for which there

is a national standard.

"Installation" means a discrete process with identifiable emissions which may be part of a larger industrial plant. Pollution equipment shall not be considered a separate installation or installations.

"LPG" means liquified petroleum gas such as propane or butane.

"Maintenance Area" means an area that is subject to the provisions of a maintenance plan that is included in the Utah state implementation plan, and that has been redesignated by EPA from nonattainment to attainment of any National Ambient Air Quality Standard.

(a) The following areas are considered maintenance areas for ozone:

(i) Salt Lake County, effective August 18, 1997; and

(ii) Davis County, effective August 18, 1997.

(b) The following areas are considered maintenance areas for carbon monoxide:

(i) Salt Lake City, effective March 22, 1999;

(ii) Ogden City, effective May 8, 2001; and

(iii) Provo City, effective on the date that EPA approves the maintenance plan that was adopted by the Board on March 31, 2004.

(c) The following areas are considered maintenance areas for PM10:

(i) Salt Lake County, effective on the date that EPA approves the maintenance plan that was adopted by the Board on June 1, 2005; and

(ii) Utah County, effective on the date that EPA approves the maintenance plan that was adopted by the Board on June 1, 2005; and

(iii) Ogden City, effective on the date that EPA approves the maintenance plan that was adopted by the Board on June 1, 2005.

(d) The following areas are considered maintenance areas for sulfur dioxide:

(i) Salt Lake County, effective on the date that EPA approves the maintenance plan that was adopted by the Board on January 5, 2005.

"Major Modification" means any physical change in or change in the method of operation of a major source that would result in a significant net emissions increase of any pollutant. A net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone. Within Salt Lake and Davis Counties or any nonattainment area for ozone, a net emissions increase that is significant for nitrogen oxides shall be considered significant for ozone. Within areas

of nonattainment for PM10, a significant net emission increase for any PM10 precursor is also a significant net emission increase for PM10. A physical change or change in the method of operation shall not include:

(1) routine maintenance, repair and replacement;

(2) use of an alternative fuel or raw material by reason of an order under section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(3) use of an alternative fuel by reason of an order or rule under section 125 of the federal Clean Air Act;

(4) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(5) use of an alternative fuel or raw material by a source:

(a) which the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any enforceable permit condition; or

(b) which the source is otherwise approved to use;

(6) an increase in the hours of operation or in the production rate unless such change would be prohibited under any enforceable permit condition;

(7) any change in ownership at a source

(8) the addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the executive secretary determines that such addition, replacement, or use renders the unit less environmentally beneficial, or except:

(a) when the executive secretary has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I of the Clean Air Act, if any, and

(b) the executive secretary determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation.

(9) the installation, operation, cessation, or removal of a temporary clean coal demonstration project, provided that the project complies with:

(a) the Utah State Implementation Plan; and

(b) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

"Major Source" means, to the extent provided by the federal Clean Air Act as applicable to R307:

(1) any stationary source of air pollutants which emits, or has the potential to emit, one hundred tons per year or more of any pollutant subject to regulation under the Clean Air Act; or

(a) any source located in a nonattainment area for carbon monoxide which emits, or has the potential to emit, carbon monoxide in the amounts outlined in Section 187 of the federal Clean Air Act with respect to the severity of the nonattainment area as outlined in Section 187 of the federal Clean Air Act; or

(b) any source located in Salt Lake or Davis Counties or in a nonattainment area for ozone which emits, or has the potential to emit, VOC or nitrogen oxides in the amounts outlined in Section 182 of the federal Clean Air Act with respect to the severity of the nonattainment area as outlined in Section 182 of the federal Clean Air Act; or

(c) any source located in a nonattainment area for PM10 which emits, or has the potential to emit, PM10 or any PM10 precursor in the amounts outlined in Section 189 of the federal Clean Air Act with respect to the severity of the nonattainment area as outlined in Section 189 of the federal Clean Air Act.

(2) any physical change that would occur at a source not qualifying under subpart 1 as a major source, if the change would constitute a major source by itself;

(3) the fugitive emissions and fugitive dust of a stationary source shall not be included in determining for any of the purposes of these R307 rules whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

(a) Coal cleaning plants (with thermal dryers);
(b) Kraft pulp mills;
(c) Portland cement plants;
(d) Primary zinc smelters;
(e) Iron and steel mills;
(f) Primary aluminum or reduction plants;
(g) Primary copper smelters;
(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
(i) Hydrofluoric, sulfuric, or nitric acid plants;
(j) Petroleum refineries;
(k) Lime plants;
(l) Phosphate rock processing plants;
(m) Coke oven batteries;
(n) Sulfur recovery plants;
(o) Carbon black plants (furnace process);
(p) Primary lead smelters;
(q) Fuel conversion plants;
(r) Sintering plants;

(s) Secondary metal production plants;
(t) Chemical process plants;
(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British Thermal Units per hour heat input;
(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
(w) Taconite ore processing plants;
(x) Glass fiber processing plants;
(y) Charcoal production plants;
(z) Fossil fuel-fired steam electric plants of more than 250 million British Thermal Units per hour heat input;
(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the federal Clean Air Act.

"Modification" means any planned change in a source which results in a potential increase of emission.

"National Ambient Air Quality Standards (NAAQS)" means the allowable concentrations of air pollutants in the ambient air specified by the Federal Government (Title 40, Code of Federal Regulations, Part 50).

"Net Emissions Increase" means the amount by which the sum of the following exceeds zero:

(1) any increase in actual emissions from a particular physical change or change in method of operation at a source; and

(2) any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable. For purposes of determining a "net emissions increase":

(a) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date five years before construction on the particular change commences; and the date that the increase from the particular change occurs.

(b) An increase or decrease in actual emissions is creditable only if it has not been relied on in issuing a prior approval for the source which approval is in effect when the increase in actual emissions for the particular change occurs.

(c) An increase or decrease in actual emission of sulfur dioxide, nitrogen oxides or particulate matter which occurs before an applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available. With respect to particulate matter, only PM10 emissions will be used to evaluate this increase or decrease.

(d) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the

old level.

(e) A decrease in actual emissions is creditable only to the extent that:

(i) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(ii) It is enforceable at and after the time that actual construction on the particular change begins; and

(iii) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(iv) It has not been relied on in issuing any permit under R307-401 nor has it been relied on in demonstrating attainment or reasonable further progress.

(f) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

"New Installation" means an installation, construction of which began after the effective date of any regulation having application to it.

"Nonattainment Area" means [~~for any pollutant, "an area which is shown by monitored data or which is calculated by air quality modeling (or other methods determined by the Administrator, EPA to be reliable) to exceed any National Ambient Air Quality Standard for such pollutant" (Section 171, Clean Air Act). Such term includes any~~]an area designated by the Environmental Protection Agency as nonattainment under Section 107, Clean Air Act for any National Ambient Air Quality Standard. The designations for Utah are listed in 40 CFR 81.345.

"Offset" means an amount of emission reduction, by a source, greater than the emission limitation imposed on such source by these regulations and/or the State Implementation Plan.

"Opacity" means the capacity to obstruct the transmission of light, expressed as percent.

"Open Burning" means any burning of combustible materials resulting in emission of products of combustion into ambient air without passage through a chimney or stack.

"Owner or Operator" means any person who owns, leases, controls, operates or supervises a facility, an emission source, or air pollution control equipment.

"PSD" Area means an area designated as attainment or unclassifiable under section 107(d)(1)(D) or (E) of the federal Clean Air Act.

[~~"PM10 Nonattainment Area" means Salt Lake County, Utah County, or Ogden City.~~

]"PM10 [~~Particulate Matter~~]" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by an EPA reference or equivalent method.

"PM10 Precursor" means any chemical compound or substance which, after it has been emitted into the atmosphere, undergoes chemical or physical changes that convert it into particulate matter, specifically PM10. [~~It includes sulfur dioxide and nitrogen oxides.~~]

"Part 70 Source" means any source subject to the permitting requirements of R307-415.

"Peak Ozone Season" means June 1 through August 31, inclusive.

"Person" means an individual, trust, firm, estate, company, corporation, partnership, association, state, state or federal agency or entity, municipality, commission, or political subdivision of a state. (Subsection 19-2-103(4)).

"Pollution Control Project" means any activity or project at an existing electric utility steam generating unit for purposes of reducing emissions from such unit. Such activities or projects are limited to:

(1) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;

(2) An activity or project to accommodate switching to a fuel which is less polluting than the fuel used prior to the activity or project, including, but not limited to natural gas or coal reburning, or the cofiring of natural gas and other fuels for the purpose of controlling emissions;

(3) A permanent clean coal technology demonstration project conducted under Title II, sec. 101(d) of the Further Continuing Appropriations Act of 1985 (sec. 5903(d) of title 42 of the United States Code), or subsequent appropriations, up to a total amount of $2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency; or

(4) A permanent clean coal technology demonstration project that constitutes a repowering project.

"Potential to Emit" means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant including air pollution control equipment and restrictions on hours of operation or on the type

or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

"Process Level" means the operation of a source, specific to the kind or type of fuel, input material, or mode of operation.

"Process Rate" means the quantity per unit of time of any raw material or process intermediate consumed, or product generated, through the use of any equipment, source operation, or control apparatus. For a stationary internal combustion unit or any other fuel burning equipment, this term may be expressed as the quantity of fuel burned per unit of time.

"Production Equipment Exhaust System" means a device for collecting and directing out of the work area VOC fugitive emissions from reactor openings, centrifuge openings, and other vessel openings for the purpose of protecting employees from excessive VOC exposure.

"Reactivation of a Very Clean Coal-Fired Electric Utility Steam Generating Unit" means any physical change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the emission inventory at the time of enactment;

(2) Was equipped prior to shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(3) Is equipped with low-NOx burners prior to the time of commencement of operations following reactivation; and

(4) Is otherwise in compliance with the requirements of the Clean Air Act.

"Reactor" means any vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions.

"Reasonable Further Progress" means annual incremental reductions in emission of an air pollutant which are sufficient to provide for attainment of the NAAQS by the date identified in the State Implementation Plan.

"Refuse" means solid wastes, such as garbage and trash.

"Regulated air pollutant" means any of the following:

(a) Nitrogen oxides or any volatile organic compound;

(b) Any pollutant for which a national ambient air quality

standard has been promulgated;

(c) Any pollutant that is subject to any standard promulgated under Section 111 of the Act, Standards of Performance for New Stationary Sources;

(d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act, Stratospheric Ozone Protection;

(e) Any pollutant subject to a standard promulgated under Section 112, Hazardous Air Pollutants, or other requirements established under Section 112 of the Act, including Sections 112(g), (j), and (r) of the Act, including any of the following:

(i) Any pollutant subject to requirements under Section 112(j) of the Act, Equivalent Emission Limitation by Permit. If the Administrator fails to promulgate a standard by the date established pursuant to Section 112(e) of the Act, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to Section 112(e) of the Act;

(ii) Any pollutant for which the requirements of Section 112(g)(2) of the Act (Construction, Reconstruction and Modification) have been met, but only with respect to the individual source subject to Section 112(g)(2) requirement.

"Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

(1) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

(2) The executive secretary shall give expedited consideration to permit applications for any source that satisfies the requirements of this definition and is granted an extension under section 49 of the Clean Air Act.

"Representative Actual Annual Emissions" means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of unit, (or a different consecutive two-year period within 10 years after that change, where the executive secretary determines that such period is

more representative of source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the executive secretary shall:

(1) Consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State of Federal regulatory authorities, and compliance plans under title IV of the Clean Air Act; and

(2) Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

"Residence" means a dwelling in which people live, including all ancillary buildings.

"Residential Solid Fuel Burning" device means any residential burning device except a fireplace connected to a chimney that burns solid fuel and is capable of, and intended for use as a space heater, domestic water heater, or indoor cooking appliance, and has an air-to-fuel ratio less than 35-to-1 as determined by the test procedures prescribed in 40 CFR 60.534. It must also have a useable firebox volume of less than 6.10 cubic meters or 20 cubic feet, a minimum burn rate less than 5 kilograms per hour or 11 pounds per hour as determined by test procedures prescribed in 40 CFR 60.534, and weigh less than 800 kilograms or 362.9 pounds. Appliances that are described as prefabricated fireplaces and are designed to accommodate doors or other accessories that would create the air starved operating conditions of a residential solid fuel burning device shall be considered as such. Fireplaces are not included in this definition for solid fuel burning devices.

"Road" means any public or private road.

"Salvage Operation" means any business, trade or industry engaged in whole or in part in salvaging or reclaiming any product or material, including but not limited to metals, chemicals, shipping containers or drums.

"Secondary Emissions" means emissions which would occur as a result of the construction or operation of a major source or major modification, but do not come from the major source or major modification itself.

Secondary emissions must be specific, well defined,

quantifiable, and impact the same general area as the source or modification which causes the secondary emissions. Secondary emissions include emissions from any off-site support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

Fugitive emissions and fugitive dust from the source or modification are not considered secondary emissions.

"Significant" means:

(1) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Carbon monoxide: 100 ton per year (tpy);

Nitrogen oxides: 40 tpy;

Sulfur dioxide: 40 tpy;

PM10[~~Particulate matter~~]: 15 tpy;

Particulate matter: 25 tpy;

Ozone: 40 tpy of volatile organic compounds;

Lead: 0.6 tpy.

(2) For purposes of R307-405 it shall also additionally mean for:

(a) A rate of emissions that would equal or exceed any of the following rates:

Asbestos: 0.007 tpy;

Beryllium: 0.0004 tpy;

Mercury: 0.1 tpy;

Vinyl Chloride: 1 tpy;

Fluorides: 3 tpy;

Sulfuric acid mist: 7 tpy;

Hydrogen Sulfide: 10 tpy;

Total reduced sulfur (including H2S): 10 tpy;

Reduced sulfur compounds (including H2S): 10 tpy;

Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2 grams per year (3.5×10^{-6} tons per year);

Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tons per year);

Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year);

Municipal solid waste landfill emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tons per year);

(b) In reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the Clean Air Act not listed in (1) and (2) above, any emission rate.

(c) Notwithstanding the rates listed in (1) and (2) above, any emissions rate or any net emissions increase associated with a major source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 ug/cubic meter, (24-hour average).

"Solid Fuel" means wood, coal, and other similar organic material or combination of these materials.

"Solvent" means organic materials which are liquid at standard conditions (Standard Temperature and Pressure) and which are used as dissolvers, viscosity reducers, or cleaning agents.

"Source" means any structure, building, facility, or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act and which is located on one or more continuous or adjacent properties and which is under the control of the same person or persons under common control. A building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e. which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (US Government Printing Office stock numbers 4101-0065 and 003-005-00176-0, respectively).

"Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

"Standards of Performance for New Stationary Sources" means the Federally established requirements for performance and record keeping (Title 40 Code of Federal Regulations, Part 60).

"State" means Utah State.

"Synthesized Pharmaceutical Manufacturing" means the manufacture of pharmaceutical products by chemical synthesis.

"Temporary" means not more than 180 calendar days.

"Temporary Clean Coal Demonstration Project" means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the Utah State Implementation Plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

"Threshold Limit Value - Ceiling (TLV-C)" means the

airborne concentration of a substance which may not be exceeded, as adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Threshold Limit Value - Time Weighted Average (TLV-TWA)" means the time-weighted airborne concentration of a substance adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Total Suspended Particulate (TSP)" means minute separate particles of matter, collected by high volume sampler.

"Toxic Screening Level" means an ambient concentration of an air contaminant equal to a threshold limit value - ceiling (TLV- C) or threshold limit value -time weighted average (TLV-TWA) divided by a safety factor.

"Trash" means solids not considered to be highly flammable or explosive including, but not limited to clothing, rags, leather, plastic, rubber, floor coverings, excelsior, tree leaves, yard trimmings and other similar materials.

"Vertically Restricted Emissions Release" means the release of an air contaminant through a stack or opening whose flow is directed in a downward or horizontal direction due to the alignment of the opening or a physical obstruction placed beyond the opening, or at a height which is less than 1.3 times the height of an adjacent building or structure, as measured from ground level.

"Vertically Unrestricted Emissions Release" means the release of an air contaminant through a stack or opening whose flow is directed upward without any physical obstruction placed beyond the opening, and at a height which is at least 1.3 times the height of an adjacent building or structure, as measured from ground level.

"Volatile Organic Compound (VOC)" as defined in 40 CFR Subsection 51.100(s)(1), as published on July 1, 1998, is hereby adopted and incorporated by reference.

"Waste" means all solid, liquid or gaseous material, including, but not limited to, garbage, trash, household refuse, construction or demolition debris, or other refuse including that resulting from the prosecution of any business, trade or industry.

"Zero Drift" means the change in the instrument meter readout over a stated period of time of normal continuous operation when the VOC concentration at the time of measurement is zero.

KEY: air pollution, definitions
[~~December 31, 2003~~]2005 **19-2-104**

R307. Environmental Quality, Air Quality.
R307-165. Emission Testing.
R307-165-1. Purpose.

R307-165 establishes the frequency of emission testing requirements for all areas in the state.

R307-165-[1]2. Testing Every 5 Years.

[~~(1)~~]Emission testing [~~will be~~]is required at least once every five years of all sources with established emission limitations specified in approval orders issued under R307-401 or in section IX, Part H of the Utah state implementation plan. [~~at least once every five years. For sources located in nonattainment areas, emission testing will be required at least once every five years or more frequently as specified in Section IX, Part H of the Utah State Implementation Plan (SIP) adopted by the Air Quality Board, or by the Executive Secretary if he has reason to believe that the source is not meeting its emission limitation. Sources approved in accordance with R307-401 will be tested within six months of start up. Sources for which emission limitations are established by R307-305-5 which do not require modification will be tested within one year of the effective date of these regulations.~~] In addition, if the [~~E~~]executive [~~S~~]secretary has reason to believe that an applicable emission limitation is being exceeded [~~(i.e., through visible emission observations and monitoring data, etc.), he~~], the executive secretary may require the owner or operator to perform such emission testing as is necessary to determine actual compliance status. The Board may grant exceptions to the mandatory testing requirements of R307-165-[~~1~~]2 [~~which~~]that are [~~not in~~]consistent with the purposes of R307.

R307-165-[~~2~~]3. Notification of DAQ.

At least 30 days prior to conducting any emission testing required under any part of R307, the owner or operator shall notify the [~~E~~]executive [~~S~~]secretary of the date, time and place of such testing and, if determined necessary by the [~~E~~]executive [~~S~~]secretary, the owner or operator shall attend a pretest conference.

R307-165-[~~3~~]4. Test Conditions.

All tests shall be conducted while the source is operating at the maximum production or combustion rate at which such source will be operated. During the tests, the source shall burn fuels or [~~combustion~~]combinations of fuels, use raw materials, and maintain process conditions representative of normal operations.[~~, and~~] In addition, the source shall operate under such other relevant conditions as the [~~E~~]executive

[~~S~~]secretary shall specify.

R307-165-[4]S. Rejection of Test Results.

The [E]executive [~~S~~]secretary may reject emissions test data if they are determined to be incomplete, inadequate, not representative of operating conditions specified for the test, or if the [~~State~~]executive secretary was not provided an opportunity to have an observer present at the test.

KEY: air pollution, emission testing [*]
[~~1998~~]2005 **19-2-104(1)**

R307. Environmental Quality, Air Quality.
R307-201. Emission Standards: General Emission Standards.
R307-201-1. Purpose.

R307-201 establishes emission standards for all areas of the state except for sources listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

R307-201-2. Applicability.

R307-201 applies statewide to any sources of emissions except for sources listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

R307-201-3. Visible Emissions Standards.

[~~Other provisions of R307 may require more stringent controls than listed herein, in which case those requirements must be met.~~

~~(1) Visible Emissions. Opacity limitations in R307-201-1 and R307-305-1 shall not apply to any sources for which emission limitations are assigned pursuant to R307-305-2 through 7 and R307-307. The provisions of (7) through (9) below shall apply to such sources except as otherwise provided in R307-305-2 through 7 and R307-307.~~

](1) Visible emissions from installations constructed on or before April 25, 1971, except diesel engines, shall be of a shade or density no darker than 40% opacity, except as otherwise provided in these rules.

(2) Visible emissions from installations constructed after April 25, 1971, except diesel[~~-internal combustion~~] engines[~~, or any incinerator~~] shall be of a shade or density no darker than 20% opacity, except as otherwise provided in these [~~regulations~~]rules.

(3) Visible emissions for all incinerators, no matter when constructed, shall be of shade or density no darker than 20% opacity.

[~~(3)~~](4) No owner or operator of a gasoline powered engine or vehicle shall allow, cause or permit [~~the emissions of~~]visible emissions.[~~contaminants, except for starting motion no farther than 100 yards, or for stationary operation not exceeding 3 minutes in any hour.~~]

[~~(4)~~](5) Emissions from diesel engines manufactured after January 1, 1973, shall be of a shade or density no darker than 20% opacity, except for starting motion no farther than 100 yards or for stationary operation not exceeding [~~3~~]three minutes in any hour.

[~~(5)~~](6) Emissions from diesel engines manufactured before

January 1, 1973, shall be of a shade or density no darker than 40% opacity, except for starting motion no farther than 100 yards or for stationary operation not exceeding [~~3~~]three minutes in any hour.

[~~(6) Upon application, exceptions to (4) and (5) above may be granted by the Board on a case by case basis for diesel locomotives operating above 6000 feet MSL.~~

](7) Visible emissions exceeding the opacity standards for short time periods as the result of initial warm-up, soot blowing, cleaning of grates, building of boiler fires, cooling, etc., caused by start-up or shutdown of a facility, installation or operation, or unavoidable combustion irregularities [~~which~~]that do not exceed three minutes in length [~~(unavoidable combustion irregularities which exceed three minutes in length must be handled in accordance with R307-107)~~], shall not be deemed in violation provided that the executive secretary finds that adequate control technology has been applied. Unavoidable combustion irregularities that exceed three minutes in length must be addressed in accordance with R307-107. The owner or operator shall minimize visible and non-visible emissions during start-up or shutdown of a facility, installation, or operation through the use of adequate control technology and proper procedures.

(8) Compliance Method. Emissions shall be brought into compliance with these requirements by reduction of the total weight of contaminants discharged per unit of time rather than by dilution of emissions with clean air.

(9) Opacity Observation. Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9[~~, "Visual Determination of Opacity of Emissions from Stationary Sources", 40 CFR Part 60, Appendix A~~]. Opacity observers of mobile sources and intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15 second intervals over a 6-minute period shall not apply.

R307-201-[~~2~~]4. Automobile Emission Control Devices.

Any person owning or operating any motor vehicle or motor vehicle engine registered or principally operated in the State of Utah on which is installed or incorporated a system or device for the control of crankcase emissions or exhaust emissions in compliance with the Federal motor vehicle rules, shall maintain the system or device in operable condition and shall use it at all times that the motor vehicle or motor vehicle engine is operated. No person shall remove or make inoperable [~~within the State of Utah~~]the system or device or any part thereof, except for the purpose of installing another system or device, or part thereof, which is equally or more effective in reducing

emissions from the vehicle to the atmosphere.[

~~**R307-201-3. Opacity for Residential Heating.**~~

~~Visible emissions from residential solid fuel burning devices and fireplaces shall be limited to a shade or density no darker than 20% opacity as measured by EPA Method 9, except for the following:~~

~~(1) An initial fifteen minute start up period, and~~

~~(2) A period of fifteen minutes in any three hour period in which emissions may exceed the 20% opacity limitation for refueling, and~~

~~(3) during the no burn periods required by R307-302-1.~~]

KEY: air pollution, [~~woodburning*, fireplace*, stove*~~]PM10
[~~September 15, 1998~~]2005
19-2-101
19-2-104

R307. Environmental Quality, Air Quality.
R307-204. Emission Standards: Smoke Management.
R307-204-3. Definitions.

The following additional definitions apply only to R307-204.

"Annual Emissions Goal" means the annual establishment of a planned quantitative value of emissions reductions from prescribed fire.

"Best Management Practices" means smoke management and dispersion techniques used during a prescribed fire or a wildland fire used for resource benefit that affect the direction, duration, height or density of smoke.

"Burn Plan" means the plan required for each fire ignited by managers or allowed to burn.

"Burn Window" means the period of time during which the prescribed fire is scheduled for ignition.

"Emission Reduction Techniques (ERT)" mean techniques for controlling emissions from prescribed fires to minimize the amount of emission output per unit or acre burned.

"Federal Class I Area" means any Federal land that is federally classified or reclassified Class I.

"Fire Prescription" means the measurable criteria that define conditions under which a prescribed fire may be ignited, guide selection of appropriate management responses, and indicate other required actions. Prescription criteria may include safety, economic, public health, environmental, geographic, administrative, social, or legal considerations.

"Land Manager" means any federal, state, local or private entity that owns, administers, directs, oversees or controls the use of public or private land, including the application of fire to the land.

[~~"Maintenance Area" means an area that has been redesignated by EPA from nonattainment to attainment of any National Ambient Air Quality Standard.~~

]"Non-burning Alternatives to Fire" means non-burning techniques that are used to achieve a particular land management objective, including but not limited to reduction of fuel loading, manipulation of fuels, enhancement of wildlife habitat, and ecosystem restructuring. These alternatives are designed to replace the use of fire for at least the next five years.

"Prescribed Fire or Prescribed Burn" means any fire ignited by management actions to meet specific objectives, such as achieving resource benefits.

"Particulate Matter" means the liquid or solid particles such as dust, smoke, mist, or smog found in air emissions.

"Smoke Sensitive Receptors" means population centers such as towns and villages, campgrounds and trails, hospitals,

nursing homes, schools, roads, airports, Class I areas, nonattainment and maintenance areas, areas whose air quality monitoring data indicate pollutant levels that are close to health standards, and any other areas where smoke and air pollutants can adversely affect public health, safety and welfare.

"Wildland" means an area in which development is essentially non-existent, except for pipelines, power lines, roads, railroads, or other transportation or conveyance facilities.

"Wildland Fire" means any non-structure fire, other than prescribed fire, that occurs in the wildland.

"Wildland Fire Used for Resource Benefits (WFURB)" means naturally ignited wildland fire that is managed to accomplish specific prestated resource management objectives in predefined geographic areas.

"Wildland Fire Implementation Plan" means the plan required for each fire that is allowed to burn.

KEY: air quality, fire, smoke, land manager

[~~December 31, 2003~~]2005 **19-2-104(1)(a)**

R307. Environmental Quality, Air Quality.
R307-205. Emission Standards: Fugitive Emissions and Fugitive Dust.
R307-205-1. Purpose.

R307-205 establishes minimum work practices and emission standards for sources of fugitive emissions and fugitive dust for sources located in all areas in the state except those listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

R307-205-2. Applicability.

[~~(1) Except where otherwise specified,~~]R307-205 applies statewide to all sources of fugitive emissions and fugitive dust, except for agricultural or horticultural activities specified in 19-2-114(1)-(3) and any source listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

[~~(2) The provisions of R307-205 shall not apply to any sources for which limitations for fugitive dust or fugitive emissions are assigned pursuant to R307-401, R307-305, or R307-307 nor shall they apply to agricultural or horticultural activities.~~]

R307-205-3. Definitions.

[~~(3)~~] The following definition[~~s~~] applies[~~:~~] throughout R307-205:

"Material" means sand, gravel, soil, minerals or other matter [~~which~~]that may create fugitive dust.[

~~"Road" means any public or private road.~~]

R307-205-[~~2~~]4. Fugitive Emissions.

Fugitive emissions from sources [~~in areas outside Davis, Salt Lake and Utah Counties, Ogden City and any nonattainment area for PM10 and~~]that were constructed on or before April 25, 1971, shall not exceed 40% opacity. Fugitive emissions from sources constructed or modified after April 25, 1971, shall not exceed 20% opacity.

R307-205-[~~3~~]5. Fugitive Dust.

(1) Storage and Handling of [~~Aggregate~~] Materials. Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall minimize fugitive dust from such an operation. Such control may include the use of enclosures, covers, stabilization or other equivalent methods or techniques as approved by the executive secretary.

(2) Construction and Demolition Activities.

(a) Any person engaging in clearing or leveling of land

greater than one-quarter acre in size, earthmoving, excavation, or movement of trucks or construction equipment over cleared land greater than one-quarter acre in size or access haul roads shall take steps to minimize fugitive dust from such activities. Such control may include watering and chemical stabilization of potential fugitive dust sources or other equivalent methods or techniques approved by the executive secretary.

(b) The owner or operator of any land area greater than one-quarter acre in size that has been cleared or excavated shall take measures to prevent fugitive particulate matter from becoming airborne. Such measures may include:

(i) planting vegetative cover,

(ii) providing synthetic cover,

(iii) watering,

(iv) chemical stabilization,

(v) wind breaks, or

(vi) other equivalent methods or techniques approved by the executive secretary.

(c) Any person engaging in demolition activities including razing homes, buildings, or other structures or removing paving material from roads or parking areas shall take steps to minimize fugitive dust from such activities. Such control may include watering and chemical stabilization or other equivalent methods or techniques approved by the executive secretary.

R307-205-[4]6. Roads.

(1) [~~Any person planning to construct or operate a new unpaved road which is anticipated to have an average daily traffic volume of 150 vehicle trips per day or greater, averaged over a consecutive five day period, shall submit a notice of intent to construct or operate such a road to the executive secretary pursuant to R307-401. Such notice shall include proposed action to minimize fugitive dust emissions from the road.~~

~~(2)~~]The executive secretary may require persons owning, operating or maintaining any new or existing road, or having right-of-way easement or possessory right to use the same, to supply traffic count information as determined necessary to ascertain whether or not control techniques are adequate or additional controls are necessary.

[~~(3)~~](2) Any person who deposits materials [~~which~~]that may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-205-[5]7. Mining Activities.

(1) Fugitive dust, construction activities, and roadways associated with mining activities are regulated under the

provisions of R307-205-[5]7 and not by R307-205-[3]5 and [4]6.

(2) Any person who owns or operates a mining operation shall minimize fugitive dust as an integral part of site preparation, mining activities, and reclamation operations.

(3) The fugitive dust control measures to be used may include:

(a) periodic watering of unpaved roads,

(b) chemical stabilization of unpaved roads,

(c) paving of roads,

(d) prompt removal of coal, rock minerals, soil, and other dust-forming debris from roads and frequent scraping and compaction of unpaved roads to stabilize the road surface,

(e) restricting the speed of vehicles in and around the mining operation,

(f) revegetating, mulching, or otherwise stabilizing the surface of all areas adjoining roads that are a source of fugitive dust,

(g) restricting the travel of vehicles on other than established roads,

(h) enclosing, covering, watering, or otherwise treating loaded haul trucks and railroad cars, to minimize loss of material to wind and spillage,

(i) substitution of conveyor systems for haul trucks and covering of conveyor systems when conveyed loads are subject to wind erosion,

(j) minimizing the area of disturbed land,

(k) prompt revegetation of regraded lands,

(l) planting of special windbreak vegetation at critical points in the permit area,

(m) control of dust from drilling, using water sprays, hoods, dust collectors or other controls approved by the executive secretary.

(n) restricting the areas to be blasted at any one time,

(o) reducing the period of time between initially disturbing the soil and revegetating or other surface stabilization,

(p) restricting fugitive dust at spoil and coal transfer and loading points,

(q) control of dust from storage piles through use of enclosures, covers, or stabilization and other equivalent methods or techniques as approved by the executive secretary, or

(r) other techniques as determined necessary by the executive secretary.[

~~(4) Any person owning or operating an existing mining operation in an actual area of nonattainment for particulate or an existing mining operation outside an actual area of~~

~~nonattainment from which fugitive dust impacts an actual area of nonattainment for particulate shall submit plans for control of fugitive dust from such operations to the executive secretary for approval no later than September 29, 1981, 180 days after the effective date of this regulation.~~]

R307-205-[6]8. Tailings Piles and Ponds.

(1) Fugitive dust, construction activities, and roadways associated with tailings piles and ponds are regulated under the provisions of R307-205-[~~6~~]8 and not by R307-205-[~~3 and 4~~]5 and 6.

(2) Any person owning or operating an existing tailings operation where fugitive dust results from grading, excavating, depositing, or natural erosion or other causes in association with such operation shall take steps to minimize fugitive dust from such activities. Such controls may include:

(a) watering,

(b) chemical stabilization,

(c) synthetic covers,

(d) vegetative covers,

(e) wind breaks,

(f) minimizing the area of disturbed tailings,

(g) restricting the speed of vehicles in and around the tailings operation, or

(h) other equivalent methods or techniques which may be approvable by the executive secretary.[

~~(3) Any person owning or operating an existing tailings operation in a nonattainment area for particulate or an existing mining operation outside an actual area of nonattainment from which fugitive dust impacts an actual area of nonattainment for particulate shall submit plans for control of fugitive dust from such operations to the executive secretary for approval no later than September 29, 1981, 180 days after the effective date of this regulation.~~]

KEY: air pollution, fugitive emissions[*], mining[*], tailings[*]

[~~May 4,1999~~]2005

19-2-101
19-2-104
19-2-109

R307. Environmental Quality, Air Quality.
R307-206. Emission Standards: Abrasive Blasting.
R307-206-1. Purpose.

R307-206 establishes work practice and emission standards for abrasive blasting operations for sources located statewide except for those sources listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

R307-206-2. Definitions.

(1) The following additional definitions apply to R307-206:

"Abrasive Blasting" means the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface.

"Abrasive Blasting Equipment" means any equipment utilized in abrasive blasting operations.

[~~"Abrasives" means any material used in abrasive blasting operations including but not limited to sand, slag, steel shot, garnet or walnut shells.~~

]"Confined Blasting" means any abrasive blasting conducted in an enclosure which significantly restricts air contaminants from being emitted to the ambient atmosphere, including but not limited to shrouds, tanks, drydocks, buildings and structures.

[~~"Hydroblasting" means any abrasive blasting using high pressure liquid as the propelling force.~~

]"Multiple Nozzles" means a group of two or more nozzles being used for abrasive cleaning of the same surface in such close proximity that their separate plumes are indistinguishable.

"Unconfined Blasting" means any abrasive blasting which is not confined blasting as defined above.[

~~"Wet Abrasive Blasting" means any abrasive blasting using compressed air as the propelling force and sufficient water to minimize the plume.~~]

R307-206-3. Applicability.

R307-206 applies statewide to any abrasive blasting operation, except for any source that is listed in Section IX, Part H of the state implementation plan or that is located in a PM10 nonattainment or maintenance area.

R307-206-[~~2~~]4. Visible Emission Standards.

[~~(1)~~]Visible emissions from abrasive blasting operations shall not exceed 40% opacity, except for an aggregate period of three minutes in any one hour.[~~No person shall, if he complies with performance standards outlined in R307-206-4 or if he is~~

~~not located in an area of nonattainment for particulates, discharge into the atmosphere from any abrasive blasting any air contaminant for a period or periods aggregating more than three minutes in any one hour which is a shade or density darker than 40% opacity.~~

~~(2) No person shall, if he is not complying with an applicable performance standard in R307-206-4 and is in an area of nonattainment, discharge into the atmosphere from any abrasive blasting any air contaminant for a period or periods aggregating more than three minutes in any one hour which is of a shade or density no darker than 20% opacity.~~]

R307-206-[3]5. Visible Emission Evaluation Techniques.

[~~Visible emission evaluation of abrasive blasting operations shall be conducted in accordance with the following provisions:~~

](1) Visible emissions shall be measured using EPA Method 9. Visible emissions from intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15 second intervals over a six-minute period shall not apply.

(2) Visible e[E]missions from unconfined blasting shall be [~~read~~]measured at the densest point of the emission after a major portion of the spent abrasive has fallen out, at a point not less than five feet nor more than twenty-five feet from the impact surface from any single abrasive blasting nozzle.

[~~(2)~~](3) An unconfined blasting operation that uses [~~Emissions from unconfined blasting employing~~]multiple nozzles shall be [~~judged as~~]considered a single source unless it can be demonstrated by the owner or operator that each nozzle, [~~evaluated~~]measured separately, meets the emission and performance standards provided [~~for~~] in R307-206-2 through 4.

[~~(3)~~](4) Visible e[E]missions from confined blasting shall be [~~read~~]measured at the densest point after the air contaminant leaves the enclosure.[

~~**R307-206-4. Performance Standards.**~~

~~(1) To satisfy the requirements of R307-206-2, any abrasive blasting operation may use at least one of the following performance standards:~~

~~(a) Confined blasting;~~

~~(b) Wet abrasive blasting;~~

~~(c) Hydroblasting; or~~

~~(d) Unconfined blasting using abrasives as defined in (2) below.~~

~~(2) Abrasives.~~

~~(a) Abrasives used for dry unconfined blasting referenced~~

~~in (1) above shall comply with the following performance standards:~~

~~(i). Before blasting the abrasive shall not contain more than 1% by weight material passing a #70 U.S. Standard sieve.~~

~~(ii) After blasting the abrasive shall not contain more than 1.8% by weight material 5 micron or smaller.~~

~~(b) Abrasives reused for dry unconfined blasting are exempt from (a)(ii) above, but must conform with (a)(i) above.~~

~~(3) Abrasive Certification. Sources using the performance standard of (1)(d) above to meet the requirements of R307-206-2 must demonstrate they have obtained abrasives from persons which have certified (submitted test results) to the executive secretary at least annually that such abrasives meet the requirements of(2) above.~~

~~R307-206-5. Emissions Standards.~~

~~Other provisions of R307 may require more stringent controls than listed herein, in which case these requirements must be met.~~]

KEY: air pollution, abrasive blasting[*], PM10

[~~September 15, 1998~~]2005 **19-2-104(1)(a)**

R307. Environmental Quality, Air Quality.
R307-207. Emission Standards: Residential Fireplaces and Stoves.
R307-207-1. Purpose.

R307-201 establishes emission standards for all areas of the state except for sources listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

R307-207-2. Applicability.

R307-207 applies statewide except for the following areas: all regions of Utah County north of the southernmost border of Payson City, all of Salt Lake County, all of Davis County, and in all regions of Weber County west of the Wasatch Mountain Range.

R307-207-3. Opacity for Residential Heating.

Visible emissions from residential solid fuel burning devices and fireplaces shall be limited to a shade or density no darker than 20% opacity as measured by EPA Method 9, except for the following:

(1) An initial fifteen minute start-up period, and

(2) A period of fifteen minutes in any three-hour period in which emissions may exceed the 20% opacity limitation for refueling.

KEY: woodburning, fireplace, stove, PM 10
2005 **19-2-101**
19-2-104

R307. Environmental Quality, Air Quality.
R307-302. Davis, Salt Lake, Utah, Weber Counties: Residential Fireplaces and Stoves.
R307-302-1. Definitions.

The following additional definition applies to R307-302:

"Sole Source of Heat" means the residential solid fuel burning device is the only available source of heat for the entire residence, except for small portable heaters.

R307-302-2. Applicability

(1) R307-302-3 shall apply in all regions of Utah County north of the southernmost border of Payson City and east of State Route 68, all of Salt Lake County, all of Davis County, and in all regions of Weber County west of the Wasatch Mountain Range.

(2) R307-302-4 shall apply only within the city limits of Provo in Utah County.

(3) R307-302-5 shall apply in both areas.

R307-302-[2]3. No-Burn Periods for Fine Particulate.

~~[(1) R307-302-2 shall apply only in areas in Utah County which are north of the southernmost border of Payson City, and east of State Route 68, all of Salt Lake County, and areas in Davis County which are south of the southern-most border of Kaysville.~~

~~(2)~~](1) Sole source of residential heating.

(a)[~~By September 1, 1992, all~~] Previously registered sole source residential solid fuel burning devices in areas described in (i),(ii),and(iii) below must continue to be registered with the [~~E~~]executive [~~S~~]secretary or local health district office in order to be exempt during mandatory no-burn periods as detailed below. No new registrations will be accepted in these areas.

(i) Areas of Utah County north of the southernmost border of Payson City and east of State Route 68,

(ii) all of Salt Lake County, and

(iii) areas in Davis County that are south of the southernmost border of Kaysville

(b) By November 1, 2006, all sole source residential solid fuels burning devices in Weber County west of the Wasatch Mountain Range and areas north of the southernmost border of Kaysville must be registered with the executive secretary or local health district office in order to be exempt during mandatory no-burn periods as detailed below.

[~~(3)~~](2) [~~After September 1, 1992, w~~]When the ambient concentration of PM10 measured by the monitors in Salt

Lake, Davis, Weber, or Utah Counties reaches the level of 120 micrograms per cubic meter and the forecasted weather for the specific area includes a temperature inversion which is predicted to continue for at least 24 hours, the [~~E~~]executive [~~S~~]secretary will issue a public announcement and will distribute such announcement to the local media notifying the public that a mandatory no-burn period for residential solid fuel burning devices and fireplaces is in effect. The mandatory no-burn periods will only apply to those areas or counties impacting the real-time monitoring site registering the 120 micrograms per cubic meter concentration. Residents of the affected areas[~~Salt Lake County or the affected areas of Davis and Utah Counties~~] shall not use residential solid fuel burning devices or fireplaces except those [~~which~~]that are the sole source of heat for the entire residence and registered with the [~~E~~]executive [~~S~~]secretary or the local health district office, or those having no visible emissions.

[~~(4)~~](3) PM10 Contingency Plan. If the PM10 Contingency Plan described in Section IX, Part A, of the [~~S~~]state [~~I~~]implementation [~~P~~]plan has been implemented, the following actions will be implemented immediately:

(a) The trigger level for no-burn periods as specified in [~~(3)~~](2) above will be 110 micrograms per cubic meter for that area where the PM10 Contingency Plan has been implemented; and

(b) In the regions of Utah County north of the southernmost border of Payson City and east of State Route 68, Salt Lake County, Davis County, and all regions of Weber County west of the Wasatch Mountain Range[~~Salt Lake, Davis and Utah County nonattainment areas and in any other nonattainment area~~], it shall be unlawful to sell or install for use as a solid fuel burning device any used solid fuel burning device that is not approved by the Environmental Protection Agency.

[~~(5)~~](4) After January 1, 1999, when the ambient concentration of PM2.5 measured by the monitors in Salt Lake, Davis, Weber, or Utah Counties reaches the level of 52 micrograms per cubic meter and the forecasted weather for the specific area includes a temperature inversion which is predicted to continue for at least 24 hours, the executive secretary will issue a public announcement and will distribute such announcement to the local media notifying the public that a mandatory no-burn period for residential solid fuel burning devices and fireplaces is in effect. The mandatory no-burn periods will only apply to those areas or counties impacting the real-time monitoring

site registering the 52 micrograms per cubic meter concentration. Residents of Salt Lake County, Davis County, or the affected areas of Utah and Weber Counties[~~Salt Lake County or the affected areas of Davis and Utah Counties~~] shall not use residential solid fuel burning devices or fireplaces except those [~~which~~]that are the sole source of heat for the entire residence and registered with the [E]executive [S]secretary or the local health district office, or those having no visible emissions.

R307-302-[~~3~~]4. No-Burn Periods for Carbon Monoxide.

[~~(1) R307-302-3 shall apply only within the city limits of Provo and Orem in Utah County.~~

~~(2)~~](1) Beginning on November 1 and through March 1[~~in any years after 1993~~], the executive secretary will issue a public announcement and will distribute such announcement to the local media notifying the public that a mandatory no-burn period for residential solid fuel burning devices and fireplaces is in effect when the running eight-hour average carbon monoxide concentration as monitored by the state at 4:00 PM reaches a value of 6.0 ppm or more.

[~~(3)~~](2) In addition to the conditions contained in [~~(2)~~](1) above, the executive secretary may use meteorological conditions to initiate a no-burn period. These conditions are:

(a) a national weather service forecasted clearing index value of 250 or less;

(b) forecasted wind speeds of three miles per hour or less;

(c) passage of a vigorous cold front through the Wasatch Front; or

(d) arrival of a strong high pressure system into the area.

[~~(4)~~](3) During the no-burn periods specified in [~~(2)~~](1) and [~~(3)~~](2) above, residents of Provo [~~and Orem~~] Cit[~~ies~~]y shall not use residential solid fuel burning devices or fireplaces except those [~~which~~]that are the sole source of heat for the entire residence and are registered with the executive secretary or the local health district office, or those having no visible emissions.

R307-302-5. Opacity for Residential Heating.

Except during no-burn periods as required by R307-302-3 and 4, visible emissions from residential solid fuel burning devices and fireplaces shall be limited to a shade

or density no darker than 20% opacity as measured by EPA Method 9, except for the following:

(1) An initial fifteen minute start-up period, and

(2) A period of fifteen minutes in any three-hour period in which emissions may exceed the 20% opacity limitation for refueling.[

~~**R307-302-4. Violations.**~~

~~It shall be a violation of R307-302 for any person to operate a residential solid fuel burning device or fireplace during the mandatory no burn periods except as stated in R307-302-2 or 3.~~]

KEY: air pollution, woodburning[*], fireplace[*], stove[*]
[~~1999~~]2005 **19-2-101**
19-2-104

R307. Environmental Quality, Air Quality.
R307-305. ~~[Davis, Salt Lake and Utah Counties and Ogden City, and]~~ Nonattainment and Maintenance Areas for PM10: ~~[Particulates]~~Emission Standards.
R307-305-1. Purpose.

This rule establishes emission standards and work practices for sources located in PM10 nonattainment and maintenance areas to meet the reasonably available control measures requirement in section 189(a)(1)(C) of the Act.

R307-305-2. Applicability.

The requirements of R307-305 apply to the owner or operator of any source that is listed in Section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

R307-305-~~[1]~~3. Visible Emissions.

(1) ~~[In PM10 Nonattainment Areas, v]~~Visible emissions from existing installations except diesel ~~[gasoline powered internal combustion]~~engines~~[,]~~ shall be of a shade or density no darker than 20% opacity. Visible emissions shall be measured using EPA Method 9.~~[Installations in other areas of the State which were constructed before April 25, 1971, except internal combustion engines, shall be of a shade or density no darker than 40% opacity except as provided in these regulations.~~

~~(2) Emissions Standards. Other provisions of R307 may require more stringent controls than R307-305, in which case those requirements must be met.~~]

(2) No owner or operator of a gasoline engine or vehicle shall allow, cause or permit the emissions of visible contaminants.

(3) Emissions from diesel engines shall be of a shade or density no darker than 20% opacity, except for starting motion no farther than 100 yards or for stationary operation not exceeding three minutes in any hour.

R307-305-~~[2]~~4. Particulate Emission Limitations and Operating Parameters (PM10).

~~[All]~~Any source~~[s]~~ with emission~~[s]~~ limits included in Section IX, Part H, of the Utah state implementation plan ~~[of 25 tons per year or more (combinations of sulfur dioxide, oxides of nitrogen, and PM10) in areas located in or affecting PM10 Nonattainment Areas in Salt Lake and Utah Counties]~~shall ~~[meet the]~~comply with those emission limitations and operating parameters. ~~[contained in Section IX, Part H, of the Utah State Implementation Plan (SIP). Existing sources located in or affecting PM10 Nonattainment Areas shall use reasonably~~

~~available control measures to the extent necessary to insure the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). The emission limitations specified in the SIP constitute, in the judgment of the Board, reasonably available control measures necessary to insure attainment and maintenance of the NAAQS not later than December 31, 1994. Specific limitations for installations within a source listed in the SIP which are not specified will be set by order of the Board.~~] Specific limitations will be set by the executive secretary, through an approval order issued under R307-401, for installations within a source that do not have limitations specified in the state implementation plan. [~~Specific limitations for installations within a source may be adjusted by order of the Board provided the adjustment does not adversely affect achieving the applicable NAAQS.~~]

R307-305-[~~3~~]5. Compliance Testing (PM10).

Compliance testing for [~~the~~]PM10, sulfur dioxide, and oxides of nitrogen emission limitations shall be done in accordance with Section IX, Part H of the [~~SIP~~]state implementation plan. PM10 compliance shall be determined from the results of EPA test method 201 or 201a. A backhalf analysis shall be performed for inventory purposes for each PM10 compliance test in accordance with a method approved by the [~~E~~]executive [~~S~~]secretary. [~~for inventory purposes. For sources not requiring changes to their process or air pollution control devices to achieve compliance with the emission limitations contained in these regulations, compliance testing shall be scheduled with the Executive Secretary within three months after promulgation of R307-305-3. For Utah County sources listed in Section IX, Part H.1, of the SIP which need to make major changes to comply, a construction/installation schedule for demonstration of compliance with limitations contained in the SIP, shall be submitted by the owner/operator by February 15, 1991. Those sources located in Salt Lake and Davis County listed in Section IX, Part H.2, of the SIP which need to make major changes to comply shall submit to the Executive Secretary a construction/installation schedule for demonstration of compliance with limitations contained in the SIP within three months after the effective date of R307-305-3 for approval. Those sources making major changes of process equipment or air pollution control equipment shall submit a notice in accordance with R307-401, for the purpose of meeting the emissions limitations contained in Section IX, Part H of the SIP and receive approval from the Executive Secretary. The schedule indicated above shall result in demonstration of compliance with the limitations by December 31, 1992, unless an alternate~~

~~schedule has been approved by the Executive Secretary. The alternate schedule shall be approved by the Executive Secretary if the owner/operator demonstrates that the schedule or implementation of control measures is as expeditious as practicable, but extends beyond December 31, 1992. Any submittal requesting an alternate schedule shall be done in accordance with the requirements of the Federal Clean Air Act, and shall be consistent with the SIP demonstration of attainment by December 31, 1994.~~

~~**R307-305-4. Compliance Schedule (PM10).**~~

~~The owner or operator of an existing installation listed in the SIP is required to achieve the emission limitation or other requirements established by the SIP as expeditiously as practicable, but no later than December 31, 1992. For those sources granted an alternate schedule in accordance with R307-305-3, compliance with the limitations shall be demonstrated as provided in the approved schedule. Until the time a source is required to demonstrate compliance with the limitations in the SIP, the source shall comply with the applicable provisions of the existing total suspended particulate (TSP) limitations and operating parameters listed in the Utah Air Conservation Regulations dated April 1, 1990, or existing approval orders.~~

~~**R307-305-5. Particulate Emission Limitations and Operating Parameters (TSP).**~~

~~(1) Existing sources located in or affecting areas of nonattainment shall use reasonably available control measures to the extent necessary to insure the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). The emission limitations specified in this paragraph constitute, in the judgment of the Board, reasonably available control measures necessary to insure attainment and maintenance of the NAAQS as of the date of promulgation of these regulations. Specific limitations for installations within a source listed below which are not specified will be set by order of the Board. Specific limitations for installations within a source listed below may be adjusted by order of the Board provided the adjustment does not adversely affect achieving the applicable NAAQS.~~

~~(2) The owner or operator of any source listed in this paragraph shall not allow exceedance of the emission limitation or violation of any other listed requirement (See schedule for compliance listed in R307-305-6). The requirements listed for the sources in Weber County apply unless modified by an approval order or compliance order issued after February 16, 1982.~~

~~TABLE~~

~~IDENTIFICATION OF SOURCE (SOURCES 25 TONS/YEAR OR GREATER ACTUAL EMISSIONS) EMISSION LIMITATIONS~~

~~WEBER COUNTY (TSP)~~

~~1. Farmers Grain Coop 20% opacity each stack/vent unloading/loading/ cleaning and grinding stacks/vents~~

~~2. Fife Rock Products Asphalt Plant (Hot mix dryer) 0.040 gr/dscf, 20% opacity (stack and fugitive emissions)~~

~~3. Interpace Corporation 4/2/81 Grinding and screening 20% opacity (vents and fugitive emissions)~~

~~4. Parsons Asphalt Plant 0.040 gr/dscf, 20% opacity (stack and fugitive emissions)~~

~~5. Pillsbury Co. Loading, milling, unloading 20% opacity each vent~~

~~6. Teledyne Incinerator 0.080 gr/dscf, 20% opacity~~

~~7. Gibbons and Reed Asphalt Plant 4/2/81 0.030 gr/dscf, 20% opacity~~

~~**R307-305-6. Compliance Schedule (TSP).**~~

~~The owner or operator of an existing installation which is a source of a pollutant in a nonattainment area for the pollutant, or which has significant impact (Based on the increment levels in R307-403-3(1)) upon a nonattainment area, is required to achieve the established emission limitation or other requirements established by these regulations as expeditiously as practicable but no later than December 31, 1982, or such later date as may be specified by Congress or EPA under the Clean Air Act. Within 180 days after the effective date of a~~

~~regulation establishing a standard of pollutant control pursuant to an emission limitation under R307-305-1 or 5, the owner or operator of an existing installation not meeting these requirements must submit a notice of intent as outlined in R307-401 together with a compliance schedule. The compliance schedule shall contain proposed interim measures to control and identify the degree of emission reduction to be achieved by each such interim measure of control.~~

~~**R307-305-7. Compliance Testing (TSP).**~~

~~(1) Testing Methodology.~~

~~(a) Except as otherwise provided in R307-305-7, compliance testing for gravimetric emission limitations for particulate shall be pursuant to EPA reference Method 5 or EPA reference Method 17 where appropriate and approved by the Executive Secretary. Where EPA reference Method 5 is used for compliance testing, determination of compliance with gravimetric emission limitations shall be made through the use of front half catch. The Executive Secretary may require that Method 5 full train analysis be conducted and that back half data also be submitted but only for information purposes. Such information shall not be used to determine compliance with gravimetric emission limitations. EPA reference Method 1 shall be used to select the sampling site and number of traverse sampling points. Where necessary for determination of stack gas velocities, EPA reference Method 2 shall be used. Where necessary for determination of dry molecular weight, EPA reference Method 3 shall be used. Where necessary for determination of moisture content in stack gases EPA reference Method 4 shall be used. All EPA reference methods referred to in R307-305-7 are those found in 40 CFR 60, Appendix A.~~

~~(b) Except as provided below in these regulations any alternate test methods or sampling methods may be used with the approval of the Executive Secretary, provided, however, that if such reference tests or sampling methods are used to test compliance with federal law they may be used only if approved, in writing, by the Administrator of EPA or his representative.~~

~~(2) Special Sampling and Compliance Testing Requirements for Fossil Fuel Fired Power Plants. Method 5 or EPA reference Method 17 where appropriate (only when stack temperatures do not exceed 320 degrees F) and approved by the Executive Secretary shall be run for fossil fuel fired power plants as modified by 40 CFR 60, Subpart D or Da whichever is applicable. Method 9 shall be run for opacity.~~

~~(3) Exceptions for Special Sampling and Testing Conditions for Performance for Incinerators. Method 5 shall be run for incinerators as modified by 40 CFR 60, Subpart E.~~

~~(4) Special Conditions for Sampling for Portland Cement Plants. Method 5 or EPA Reference Method 17 where appropriate and approved by the Executive Secretary shall be run for Portland Cement Plants. If compliance is tested by use of Method 5, Method 5 shall be modified as provided in 40 CFR 60, Subpart F.~~]

R307-305-6. Automobile Emission Control Devices.

Any person owning or operating any motor vehicle or motor vehicle engine registered in the State of Utah on which is installed or incorporated a system or device for the control of crankcase emissions or exhaust emissions in compliance with the Federal motor vehicle rules, shall maintain the system or device in operable condition and shall use it at all times that the motor vehicle or motor vehicle engine is operated. No person shall remove or make inoperable within the State of Utah the system or device or any part thereof, except for the purpose of installing another system or device, or part thereof, which is equally or more effective in reducing emissions from the vehicle to the atmosphere.

R307-305-7. Compliance Schedule for New Nonattainment Areas.

The provisions of R307-305 shall apply to the owner or operator of a source that is located in any new PM10 nonattainment area 180 days after the area is officially designated a nonattainment area for PM10 by the Environmental Protection Agency.

KEY: air pollution, particulate matter[*], PM10[*], PM 2.5
[~~1998~~]2005 **19-2-104 (1)(a)**

R307. Environmental Quality, Air Quality.
R307-306. PM10 Nonattainment and Maintenance Areas: Abrasive Blasting.
R307-306-1. Purpose.

This rule establishes requirements that apply to abrasive blasting operations in PM10 nonattainment and maintenance areas.

R307-306-2. Definitions.

The following additional definitions apply to R307-306.

"Abrasive Blasting" means the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface.

"Abrasive Blasting Equipment" means any equipment used in abrasive blasting operations.

"Abrasives" means any material used in abrasive blasting operations including but not limited to sand, slag, steel shot, garnet or walnut shells.

"Confined Blasting" means any abrasive blasting conducted in an enclosure that significantly restricts air contaminants from being emitted to the ambient atmosphere, including but not limited to shrouds, tanks, drydocks, buildings and structures.

"Hydroblasting" means any abrasive blasting using high pressure liquid as the propelling force.

"Multiple Nozzles" means a group of two or more nozzles used for abrasive cleaning of the same surface in such close proximity that their separate plumes are indistinguishable.

"Unconfined Blasting" means any abrasive blasting that is not confined blasting as defined above.

"Wet Abrasive Blasting" means any abrasive blasting using compressed air as the propelling force and sufficient water to minimize the plume.

R307-306-3. Applicability.

R307-306 applies to any person who operates abrasive blasting equipment in a PM10 nonattainment or maintenance area.

R307-306-4. Visible Emission Standard.

(1) Except as provided in (2) below, visible emissions from abrasive blasting operations shall not exceed 20% opacity except for an aggregate period of three minutes in any one hour.

(2) If the abrasive blasting operation complies with the performance standards in R307-306-6, visible emissions from the operation shall not exceed 40% opacity, except for an aggregate period of 3 minutes in any one hour.

R307-306-5. Visible Emission Evaluation Techniques.

(1) Visible emissions shall be measured using EPA Method 9. Visible emissions from intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15 second intervals over a six minute period shall not

apply.

(2) Visible emissions from unconfined blasting shall be measured at the densest point of the emission after a major portion of the spent abrasive has fallen out at a point not less than five feet nor more than twenty-five feet from the impact surface from any single abrasive blasting nozzle.

(3) An unconfined blasting operation that uses multiple nozzles shall be considered a single source unless it can be demonstrated by the owner or operator that each nozzle, measured separately, meets the visible emission standards in R307-306-4.

(4) Emissions from confined blasting shall be measured at the densest point after the air contaminant leaves the enclosure.

R307-306-6. Performance Standards.

(1) To satisfy the requirements of R307-306-4(2), the abrasive blasting operation shall use at least one of the following performance standards:

(a) confined blasting;

(b) wet abrasive blasting;

(c) hydroblasting; or

(d) unconfined blasting using abrasives as defined in (2) below.

(2) Abrasives.

(a) Abrasives used for dry unconfined blasting referenced in (1) above shall comply with the following performance standards:

(i) Before blasting, the abrasive shall not contain more than 1% by weight material passing a #70 U.S. Standard sieve.

(ii) After blasting the abrasive shall not contain more than 1.8% by weight material 5 microns or smaller.

(b) Abrasives reused for dry unconfined blasting are exempt from (a)(ii) above, but must conform with (a)(i) above.

(3) Abrasive Certification. Sources using the performance standard of (1)(d) above to meet the requirements of R307-306-4(2) must demonstrate they have obtained abrasives from a supplier who has certified (submitted test results) to the executive secretary at least annually that such abrasives meet the requirements of (2) above.

R307-306-7. Compliance Schedule.

The provisions of R307-306 shall apply in any new PM10 nonattainment area 180 days after the area is officially designated a nonattainment area for PM10 by the Environmental Protection Agency.

Key: air pollution, abrasive blasting, PM10

2005 **19-2-101(1)(a)**

R307. Environmental Quality, Air Quality.
R307-309.[~~Davis, Salt Lake and Utah Counties, Ogden City and Any~~]Nonattainment and Maintenance Areas for PM10: Fugitive Emissions and Fugitive Dust.
R307-309-1. Purpose.

This rule establishes minimum work practices and emission standards for sources of fugitive emissions and fugitive dust listed in Section IX, Part H of the state implementation plan or located in PM10 nonattainment and maintenance areas to meet the reasonably available control measures for PM10 required in section 189(a)(1)(C) of the Act.

R307-309-2. Definitions.

The following addition definition applies to R307-309:

"Material" means sand, gravel, soil, minerals other matter that may create fugitive dust.

R307-309-[~~1~~](3). Applicability[~~and Definitions~~].

(1) Applicability. R307-309 applies to all sources of fugitive dust and fugitive emissions listed in Section IX, Part H of the state implementation plan or located in [~~Davis, Salt Lake and Utah Counties, Ogden City, and any~~]a nonattainment or maintenance area for PM10, except as specified in (2) below.[~~Any source located in these areas for which limitations for fugitive dust or fugitive emissions are assigned pursuant to R307-401 is subject to R307-309 on May 4, 1999, unless the source has an operating permit issued under R307-415 prior to that date. If the source has an operating permit, the source is subject to R307-309 on the date of permit renewal or permit reopening as specified in R307-415, whichever occurs first.~~]

(2) Exemptions.

(a) The provisions of R307-309 do not apply to agricultural or horticultural activities specified in 19-2-114(1)-(3).

(b) Any[~~-source~~]activity [~~which is~~]subject to [~~R307-305-2 through 7 or~~] R307-307 is exempt from [~~all provisions of~~]R307-309-7.[~~-except for R307-309-4.~~

~~(c) Any source regulated by R307-205-[5]~~7 ~~or [R307-205-6]~~8 ~~is exempt from all provisions of R307-309 except for R307-309-[4]~~6.

~~(3) The following additional definitions apply to R307-309:~~

~~"Material" means sand, gravel, soil, minerals or other matter which may create fugitive dust.~~

~~"Road" means any public or private road.~~]

(3) Compliance Schedule. Any source located in a new nonattainment area for PM10 is subject to R307-309 180 days

after the area is designated nonattainment by the Environmental Protection Agency.

R307-309-[2](4). Fugitive Emissions.

Fugitive emissions from any source shall not exceed 15% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9. For intermittent sources and mobile sources, opacity observations shall use Method 9 except the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply and any time interval with no visible emissions shall not be included.

R307-309-[3](5). General Requirements for Fugitive Dust.

(1) Except as provided in (2) below, [~~0~~]opacity caused by fugitive dust shall not exceed:

(a) 10% at the property boundary; and

(b) 20% on site [~~unless an approval order issued under R307-401 or a dust control plan specifies a lower level; Except~~]

(2) Opacity in (1) above shall not apply when the wind speed exceeds [~~25~~]30 miles per hour and the owner or operator is taking appropriate actions to control fugitive dust.

(a) If the source has a fugitive dust control plan approved by the executive secretary, control measures in the plan are considered appropriate.

(b) Wind speed may be measured by a hand-held anemometer or equivalent device.[

~~(2) Any source with a dust control plan approved by the executive secretary prior to March 4, 1999, shall review and revise the plan in accordance with R307-309-4 below. The revised plan shall be submitted to the executive secretary no later than May 4, 1999.~~]

(3) Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9. For intermittent sources and mobile sources, opacity observations shall use Method 9 except the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply and any time interval with no visible emissions shall not be included.

R307-309-[4](6). Fugitive Dust Control Plan.

(1) Any person owning or operating a new or existing source of fugitive dust, including storage, hauling or handling operations, or engaging in clearing or leveling of land one-quarter acre or greater in size, earthmoving, excavation, or movement of trucks or construction equipment over cleared land one-quarter acre or greater in size or access haul roads, or

engaging in demolition activities including razing homes, buildings or other structures shall submit a plan to control fugitive dust to the executive secretary no later than 30 days after the source becomes subject to [~~the rule~~]R307-309. The plan shall address fugitive dust control strategies for the following operations as applicable:

(a) Material Storage;
(b) Material handling and transfer;
(c) Material processing;
(d) Road ways and yard areas;
(e) Material loading and dumping;
(f) Hauling of materials;
(g) Drilling, blasting and pushing operations;
(h) Clearing and leveling;
(i) Earth moving and excavation;
(j) Exposed surfaces;
(k) Any other source of fugitive dust.

(2) Strategies to control fugitive dust may include:

(a) Wetting or watering;
(b) Chemical stabilization;
(c) Enclosing or covering operations;
(d) Planting vegetative cover;
(e) Providing synthetic cover;
(f) Wind breaks;
(g) Reducing vehicular traffic;
(h) Reducing vehicular speed;
(i) Cleaning haul trucks before leaving loading area;
(j) Limiting pushing operations to wet seasons;
(k) Paving or cleaning road ways;
(l) Covering loads;
(m) Conveyor systems;
(n) Boots on drop points;
(o) Reducing the height of drop areas;
(p) Using dust collectors;
(q) Reducing production;
(r) Mulching;
(s) Limiting the number and power of blasts;
(t) Limiting blasts to non-windy days and wet seasons;
(u) Hydro drilling;
(v) Wetting materials before processing;
(w) Using a cattle guard before entering a paved road;
(x) Washing haul trucks before leaving the loading site; [~~or~~]
(y) Terracing[~~.~~];
(z) Cleaning the materials that may create fugitive dust on a public or private paved road promptly; or
(aa) Preventing, to the maximum extent possible, material

from being deposited onto any paved road other than a designated deposit site.

(3) Each source shall comply with all provisions of the fugitive dust control plan as approved by the executive secretary.

~~**[R307-309-5. Storage, Hauling and Handling of Aggregate Materials.**~~

~~Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials [which] that may create fugitive dust on a public or private paved road shall clean the road promptly.~~

~~**R307-309-6. Construction and Demolition Activities.**~~

~~Any person engaging in clearing or leveling of land with an area of one quarter acre or more, earthmoving, excavating, construction, demolition, or moving trucks or construction equipment over cleared land or access haul roads shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials [which]that may create fugitive dust on a public or private paved road shall clean the road promptly.~~

]R307-309-7. Roads.

(1) Any person responsible for construction or maintenance of any existing road or having right-of-way easement or possessing the right to use the same whose activities result in fugitive dust from the road shall minimize fugitive dust to the maximum extent possible. Any such person who deposits materials [~~which~~]that may create fugitive dust on a public or private paved road shall clean the road promptly.

(2) Unpaved Roads.[

~~(a) When unpaved roads have an average daily traffic volume of less than 150 vehicle trips per day, averaged over a consecutive 5 day period, fugitive dust shall be minimized to the maximum extent possible.~~

~~(b) When unpaved roads have an average daily traffic volume of 150 vehicle trips per day or greater, averaged over a consecutive 5 day period, control techniques shall be used which are equal to or better than 2-inch bituminous surface.~~

~~(c)~~] Any person responsible for construction or maintenance of any new or existing unpaved road shall prevent, to the maximum extent possible, the deposit of material from the

unpaved road onto any intersecting paved road during construction or maintenance. Any person who deposits materials [~~which~~]that may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-8. Mining Activities.

(1) Fugitive dust, construction activities, and roadways associated with mining activities are regulated under the provisions of R307-309-8 and not by R307-309-7 and 9.

(2) Any person who owns or operates a mining operation shall minimize fugitive dust as an integral part of site preparation, mining activities, and reclamation operations.

(3) The fugitive dust control measures to be used may include:

(a) periodic watering of unpaved roads,

(b) chemical stabilization of unpaved roads,

(c) paving of roads,

(d) prompt removal of coal, rock minerals, soil, and other dust-forming debris from roads and frequent scraping and compaction of unpaved roads to stabilize the road surface,

(e) restricting the speed of vehicles in and around the mining operation,

(f) revegetating, mulching, or otherwise stabilizing the surface of all areas adjoining roads that are a source of fugitive dust,

(g) restricting the travel of vehicles on other than established roads,

(h) enclosing, covering, watering, or otherwise treating loaded haul trucks and railroad cars, to minimize loss of material to wind and spillage,

(i) substitution of conveyor systems for haul trucks and covering of conveyor systems when conveyed loads are subject to wind erosion,

(j) minimizing the area of disturbed land,

(k) prompt revegetation of regraded lands,

(l) planting of special windbreak vegetation at critical points in the permit area,

(m) control of dust from drilling, using water sprays, hoods, dust collectors or other controls approved by the executive secretary.

(n) restricting the areas to be blasted at any one time,

(o) reducing the period of time between initially disturbing the soil and revegetating or other surface stabilization,

(p) restricting fugitive dust at spoil and coal transfer and loading points,

(q) control of dust from storage piles through use of

enclosures, covers, or stabilization and other equivalent methods or techniques as approved by the executive secretary, or

(r) other techniques as determined necessary by the executive secretary.

R307-309-9. Tailings Piles and Ponds.

(1) Fugitive dust, construction activities, and roadways associated with tailings piles and ponds are regulated under the provisions of R307-309-9 and not by R307-309 7 and 8.

(2) Any person owning or operating an existing tailings operation where fugitive dust results from grading, excavating, depositing, or natural erosion or other causes in association with such operation shall take steps to minimize fugitive dust from such activities. Such controls may include:

(a) watering,

(b) chemical stabilization,

(c) synthetic covers,

(d) vegetative covers,

(e) wind breaks,

(f) minimizing the area of disturbed tailings,

(g) restricting the speed of vehicles in and around the tailings operation, or

(h) other equivalent methods or techniques which may be approvable by the executive secretary.

KEY: air pollution, dust[*], PM 10

~~[May 4, 1999]~~2005 **19-2-101**
19-2-104
19-2-109

R307. Environmental Quality, Air Quality.
R307-310. Salt Lake County: Trading of Emission Budgets for Transportation Conformity.
R307-310-1. Purpose.

This rule establishes the procedures that may be used to trade a portion of the primary PM10 budget when demonstrating that a transportation plan, transportation improvement program, or project conforms with the motor vehicle emission budgets in the Salt Lake County portion of Section IX, Part A of the State Implementation Plan, "Fine Particulate Matter (PM10)."

R307-310-2. Definitions.

The definitions contained in 40 CFR 93.101, effective as of July 1, 2001, are incorporated into this rule by reference. The following additional definitions apply to this rule.

"Budget" means the motor vehicle emission projections used in the attainment demonstration in the Salt Lake County portion of Section IX, Part A of the State Implementation Plan, "Fine Particulate Matter (PM10)."

"NOx" means oxides of nitrogen.

"Primary PM10" means PM10 that is emitted directly by a source. Primary PM10 does not include particulate matter that is formed when gaseous emissions undergo chemical reactions in the ambient air.

"Transportation Conformity" means a demonstration that a transportation plan, transportation improvement program, or project conforms with the emissions budgets in a state implementation plan, as outlined in 40 CFR, Chapter 1, Part 93, "Determining Conformity of Federal Actions to State or Federal Implementation Plans."

R307-310-3. Applicability.

(1) This rule applies to agencies responsible for demonstrating transportation conformity with the Salt Lake County portion of Section IX, Part A of the State Implementation Plan, "Fine Particulate Matter (PM10)."

(2) This rule does not apply to emission budgets from Section IX, Part D.2 of the State Implementation Plan, "Ozone Maintenance Plan."

(3) This rule does not apply to emission budgets from Section IX, Part C.7 of the State Implementation Plan, "Carbon Monoxide Maintenance Provisions."

R307-310-4. Trading Between Emission Budgets.

(1) The agencies responsible for demonstrating transportation conformity are authorized to supplement the budget for NOx with a portion of the budget for primary PM10 for the purpose of demonstrating transportation conformity for NOx. The NOx budget shall be supplemented using the following procedures.

(a) The metropolitan planning organization shall include the following information in the transportation conformity demonstration:

(i) The budget for primary PM10 and NOx for each required year of the conformity demonstration, before trading allowed by this rule has been applied;

(ii) The portion of the primary PM10 budget that will be used to supplement the NOx budget, specified in tons per day using a 1:1 ratio of primary PM10 to NOx, for each required year of the conformity demonstration;

(iii) The remainder of the primary PM10 budget that will be used in the conformity demonstration for primary PM10, specified in tons per day for each required year of the conformity demonstration; and

(iv) The budget for primary PM10 and NOx for each required year of the conformity demonstration after the trading allowed by this rule has been applied.

(b) Transportation conformity for NOx shall be demonstrated using the NOx budget supplemented by a portion of the primary PM10 budget as described in (a)(ii). Transportation conformity for primary PM10 shall be demonstrated using the remainder of the primary PM10 budget described in (a)(iii).

(c) The primary PM10 budget shall not be supplemented by using a portion of the NOx budget.

R307-310-5. Transition Provision.

R307-310, sections 1-4 will remain in effect until the day that EPA approves the conformity budget in the PM10 maintenance plan adopted by the board on June 1, 2005.

KEY: air pollution, transportation conformity, PM10

[~~2002~~]2005 **19-2-104**

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MINUTES

State of Utah

Department of Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

DAQ-007-2005

MEMORANDUM

TO: Air Quality Board

THROUGH: Richard Sprott, Executive Secretary

FROM: Colleen Delaney, Environmental Scientist

DATE: February 28, 2005

SUBJECT: Propose for Public Comment: New Rule R307-421, PM_{10} Offset Requirements in Salt Lake County and Utah County; and Propose Modification to R307-101-2, Definitions

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UDAQ has prepared a draft PM_{10} maintenance plan for Utah County, Salt Lake County and Ogden City for consideration by the Board. When the plan is completed, the State will request that EPA redesignate these areas to attainment for PM_{10}. These areas have been meeting the national ambient air quality standard (NAAQS) for PM_{10} since 1995 due to the significant emission reductions that were required by the PM_{10} State Implementation Plan (SIP) during the mid-1990s.

An attainment designation will formally recognize the air quality improvement that has occurred in these areas. However, it is important to look to the future and ensure that the improvements from the PM_{10} SIP are not eroded over time due to the growth of new sources. Even more importantly, the entire Wasatch Front is borderline attainment for the new $PM_{2.5}$ NAAQS. The primary mechanism that is used to address growth from stationary sources is Utah's permitting program. We have been evaluating the best way to implement this program to ensure that air quality does not degrade in the new PM_{10} maintenance areas.

When the current PM_{10} nonattainment areas in Utah are redesignated to attainment, the Prevention of Significant Deterioration (PSD) permitting program in R307-405 will become applicable in the new maintenance areas. New major sources or major modifications of existing

sources will need to perform modeling to ensure that PM_{10} levels do not deteriorate more than a set amount (called increment) and also to ensure that the new source will not cause a violation of the PM_{10} NAAQS. Modeling will also need to be done for minor sources and modifications as outlined in R307-410 to ensure that the NAAQS for PM_{10} and $PM_{2.5}$ are not exceeded. Utah's core permitting program in R307-401 will continue to require that all new and modified sources use the best available control technology (BACT).

We have identified two issues that require rule changes to ensure that the permitting program continues to address the impacts of stationary source growth in the new PM_{10} maintenance areas.

A. Mechanism Needed to Address Secondary Formation of PM_{10}

Utah's experience with redesignation to attainment for ozone is a good model for understanding how redesignation to attainment for PM_{10} will affect the permitting program. When Salt Lake and Davis Counties were redesignated to attainment for ozone, the PSD program was implemented in the former nonattainment areas. One of the challenges that Utah faced during this transition was the lack of good permitting models to determine how new sources would affect ozone levels. Ozone is not emitted directly, but is instead formed through a series of complex photochemical reactions from volatile organic compounds and nitrogen oxides. Photochemical models have been developed to simulate this process, but these models are complex and difficult to run. It is not practical to use these types of models for day-to-day permitting decisions. Instead, these models are used primarily for long-term planning, such as the development of a new SIP. The ozone maintenance plan addressed this permitting difficulty by retaining the offset provisions from the nonattainment NSR permitting rule, R307-403, when the area was redesignated to attainment. Even though the impact of a new source could not be modeled directly, the offsets would ensure that emissions of the precursors in the area would not increase due to the construction of the new source.

A portion of the particulate matter (PM) measured in Utah is directly emitted as particles (such as dust and soot,) and these direct emissions can be modeled to determine nearby impact. During winter temperature inversions, however, a significant portion of the PM is formed from gases (nitrogen oxides and sulfur dioxide). The secondary formation of PM becomes an even larger part of the overall problem when you look at fine particles ($PM_{2.5}$). As with ozone, the chemistry driving the formation of PM during winter temperature inversions is complex, and complex modeling is required to simulate this process. It is not practical to use these complex models for day-to-day permitting decisions, and so the effects of an increase in NO_x or SO_2 on overall PM_{10} levels during the winter will not be adequately evaluated through the PSD permitting process. Another mechanism is needed to manage the growth of NO_x or SO_2 sources in the new PM_{10} maintenance areas.

The nonattainment NSR permitting rule, R307-403, applies to the current PM10 nonattainment areas. This rule requires a source to offset an increase of PM_{10}, NO_x or SO_2 by decreasing emissions from another source in the nonattainment area. The PM_{10} offset provisions have been effective, and have proved workable for industry in the area. These provisions have prevented a significant increase in emissions from new sources, including minor sources, while still allowing

new source growth in the area. As demand increases for "emission reduction credits" an incentive is created for existing sources to decrease their emissions and then sell the credits to a new source that needs an emission offset.

Utah is just meeting the new $PM_{2.5}$ standard, and any emission growth could result in a new nonattainment designation. The offset program is a straightforward mechanism to allow growth without degrading air quality. UDAQ presented the idea of using emission offsets to address growth of PM_{10} precursors at the PM_{10} stakeholder meetings in November 2004 and February, 2005.

Staff Recommendation:

1. The Board should propose a new rule, R307-421, that will retain the nonattainment area offset provisions for SO_2 and NO_x in Salt Lake and Utah Counties. This rule change will maintain the current program that has been very effective to address emissions growth in the area. This approach would be similar to what was done in the ozone maintenance plan.

2. The current rule requires offsets for sources with combined emissions of PM_{10}, SO_2, and NO_x that equal 25 tons/year or greater. These applicability thresholds should be modified so that the 25 tons/year threshold would apply to SO_2 and NO_x individually. The rule should not allow inter-pollutant trading. The maintenance plan modeling does not provide the level of analysis that would be needed to establish trading ratios between pollutants. Primary PM_{10} emissions can be modeled for nearby impacts and so emission offsets do not need to be maintained for this pollutant.

3. The new rule, R307-421, should be kept as a state rule and not submitted to EPA as part of the maintenance plan. This will allow greater flexibility for implementing the rule, and should not affect the approvability of the maintenance plan because the plan does not claim any emission reduction credit for this provision. This would be similar to the approach that was used for the ozone maintenance areas.

B. PSD Major Source Baseline Date.

When the PM_{10} nonattainment areas are redesignated to attainment, new or modified major sources will need to address PM_{10} increment consumption in the area. A similar change will occur when EPA approves the SO_2 maintenance plan for Salt Lake County. The PSD increment is essentially the amount of degradation of the air quality allowed in a clean area, and is intended to protect air quality in areas that are attaining the standard. We presented a detailed discussion about the PSD permitting program to the PM_{10} stakeholders at a meeting on February 1, 2005. One of the issues discussed at this meeting was the timing of when emission changes start to affect increment. There are two dates that affect that affect the timing: the minor source baseline date and the major source baseline date.

The minor source baseline date for PM_{10} will be established for Weber, Davis, Salt Lake and Utah Counties when a PM_{10} major source or major modification application is submitted, and can be established only in an area that is designated attainment. The major source baseline date is currently established as January 6, 1975 for both particulate matter and SO_2. The definition for major source baseline date does not address how to handle nonattainment areas that were nonattainment in 1975 and are redesignated to attainment at a later date.

When the PSD program was created, an increment was established in clean areas to allow economic growth while also maintaining the good air quality in the area. Congress did not want all of the clean areas in the country to degrade to just below the level of the NAAQS. This overall goal does not work well when applied to Utah's nonattainment areas because the 1975 baseline date for major sources corresponds to a time when Davis, Salt Lake, Utah, and Weber Counties were violating the total suspended particulate (TSP) NAAQS and Salt Lake County was violating the SO_2 NAAQS. An increment that is established at a level that violates the NAAQS has little value. A more consistent approach would be to apply the goals of the PSD program to new maintenance areas, and use the PM_{10} and SO_2 increment as a way to allow economic growth in the area while also maintaining the improved air quality that has been achieved due to the PM_{10} and SO_2 NAAQS.

> **Staff recommendation:** The definition for "major source baseline date" in R307-101-2 should establish the major source baseline date for PM_{10} in Davis, Salt Lake, Utah, and Weber Counties as the date that EPA approves the PM_{10} maintenance plan. The major source baseline date for SO_2 in Salt Lake County should be the date that EPA approves the SO_2 maintenance plan.

R307. Environmental Quality, Air Quality.
R307-421. Permits: PM10 Offset Requirements in Salt Lake County and Utah County.
R307-421-1. Purpose.

The purpose of R307-421 is to require emission reductions from existing sources to offset emission increases from new or modified sources of PM10 precursors in Salt Lake and Utah Counties. The emission offset will minimize growth of PM10 precursors to ensure that these areas will continue to maintain the PM10 and PM2.5 national ambient air quality standards.

R307-421-2. Applicability.

(1) This rule applies to new or modified sources of sulfur dioxide or oxides of nitrogen that are located in or impact Salt Lake County or Utah County.

(2) A new or modified source shall be considered to impact an area if the modeled impact is greater than 1.0 microgram/cubic meter for a one-year averaging period or 3.0 micrograms/cubic meter for a 24-hour averaging period for sulfur dioxide or nitrogen dioxide.

R307-421-3. Offset Requirements.

(1) The owner or operator of any new source that has the potential to emit, or any modified source that would increase sulfur dioxide or oxides of nitrogen in an amount equal to or greater than the levels in (a) and (b) below shall obtain an enforceable emission offset as defined in (a) and (b) below.

(a) For a total of 50 tons/year or greater, an emission offset of 1.2:1 of the emission increase is required.

(b) For a total of 25 tons/year or greater but less than 50 tons/year, an emission offset of 1:1 of the emission increase is required.

R307-421-4. General Requirements.

(1) All emission offsets shall meet the general requirements for calculating and banking emission offsets that are established in R307-403-4, R307-403-7 and R307-403-8.

(2) Emission offsets shall only be used in the county where the credits are generated. In the case of sources located outside of Salt Lake or Utah Counties, the offsets shall be generated in the county where the modeled impact in R307-421-2(2) occurs.

(3) Emission offsets shall not be traded between pollutants.

R307-421-5. Transition Provision.

This rule will become effective in each county on the day

that the EPA redesignates the county to attainment for PM10. The PM10 nonattainment area offset provisions in R307-403 will continue to apply until the EPA redesignates each county to attainment for PM10.

Key: air pollution, Offset, PM10, PM 2.5
2005 **19-2-101(1)(a)**
19-2-104
19-2-108

R307. Environmental Quality, Air Quality.
R307-101. General Requirements.
R307-101-2. Definitions.

. . .

"Baseline Date" [~~:~~]

(1) Major source baseline date means:

(a) [~~:~~] in the case of particulate matter: [~~and sulfur dioxide, January 6, 1975, and~~]

(i) for Davis, Salt Lake, Utah, and Weber Counties, the date that EPA approves the PM10 maintenance plan that was adopted by the Board on June 1, 2005;

(ii) for all other areas of the state, January 6, 1975;

(b) in the case of sulfur dioxide:

(i) for Salt Lake County, the date that EPA approves the Sulfur Dioxde maintenance plan that was adopted by the Board on January 5, 2005;

(ii) for all other areas of the state, January 6, 1975; and

[~~(b)~~] (c) [~~:~~] in the case of nitrogen dioxide, February 8, 1988.

(2) Minor source baseline date means the earliest date after the trigger date on which the first complete application under 40 CFR 52.21 or R307-405 is submitted by a major source or major modification subject to the requirements of 40 CFR 52.21 or R307-405. The minor source baseline is the date after which emissions from all new or modified sources consume or expand increment, including emissions from major and minor sources as well as any or all general commercial, residential, industrial, and other growth. The trigger date is:

(a) [~~:~~] in the case of particulate matter and sulfur dioxide, August 7, 1977, and

(b) [~~:~~] in the case of nitrogen dioxide, February 8, 1988.

2 sided

Exhibit A

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

February 10, 2005

James O. Kennon, President
Sevier County Citizens for
Clean Air and Water
146 North Main Street, Suite 27
P. O. Box 182
Richfield, Utah 84701

Dear Mr. Kennon,

I have received and reviewed your request for an extension of time to provide a reply to the responses submitted to the Petition to Intervene of the Sevier County Citizens for Clean Air and Water. Your request is to extend the time for almost two months, from February 18, 2005 to April 15, 2005.

The Petition to Intervene has been pending for three months since November 1, 2004. To fairly move forward the review of the approval order issued to the Sevier Power Company Power Plant, the Board had scheduled March 9, 2005, to make a determination on the intervention requests. To delay the date for submitting replies on the question of intervention for two months would result in the Board not ruling on intervention issues until its May meeting. In reviewing your request for an extension I have considered both the issues you presented and the need to keep the administrative appeal process moving forward.

In an effort to accommodate your request, as Presiding Officer, I hereby grant an additional thirty days until March 18, 2005, for your organization to submit a reply. Accordingly, I also extend the time for any of the participants to submit a reply from February 18, 2005, to March 18, 2005. The Board will then consider the intervention petitions at its April, 2005, meeting.

Because the issues raised by the intervention requests for both the appeals of the Sevier Power Plant and the Unit 3 of the Intermountain Power Project (IPP) are similar, I am also hereby extending the date for replies in the IPP case to March 18, 2005. The petitions to intervene in the IPP case will also then be considered by the Board at its April, 2005, meeting.

Any reply you submit should address the issue of whether intervention should be allowed.

Sincerely,

John Veranth by Fred A Nelson

John Veranth
Presiding Officer, Air Quality Board

cc: Parties and participants - IPS, Unit 3 and Sevier Power Cases

James O. Kennon, President
Sevier County Citizens For
Clean Air And Water
146 North Main Street, Suite 27
P.O. Box 182
Richfield , Utah 84701

February 2, 2005

Before The
Utah Air Quality Board

In the Matter of	*	SEVIER COUNTY CITIZENS FOR CLEAN AIR AND WATER
Sevier Power Company	*	REQUEST
270 MW Coal-fired Power Plant	*	TO
Sigurd, Utah	*	The Presiding Officer for an
Project Code: N2529-001	*	Extension of time beyond the
DAQE - AN2529001-04	*	beyond the Feb 18th, 20005 deadline.

In a Brief dated January 28th, 2005 and signed by Chris Stephens, Counsel, Utah Air Quality Board, a number of questions were raised regarding the request by Sevier County Citizens For Clean Air And Water to Intervene and have Standing in the above mentioned case.(Sevier Power Company).

I. Introduction

The Sevier County Citizens For Clean Air And Water is a grass roots organization that represents a broad range of citizens adversely affected by the permitting process of the Sevier Power Company. (DAQE-An2529001-04). The appeal process has taken many twists and turns after our request to Intervene and have Standing. At the January, Air Quality Board meeting in Salt Lake City, Sevier Citizens stated that we need more time to prepare our arguments. When asked if we could respond by the February 18th, 2005 date,

the answer was that we felt we could. Now, two situations have surfaced that makes it impossible to properly respond by the February 18th, 2005 date. They are as follows:

A. With the intervention of other parties, (PacifiCorp) the possibility of a conflict of interest looms with our legal counsel. We have been working with this attorney for two years and now face the possibility of seeking other legal counsel.

B. In response to our Petition to Intervene , the attorneys for The Secretary, Utah Division of Air Quality states, " In fairness to the Executive Secretary, Sevier County Citizens must be required to state its claim in a manner that will permit a response."

II. Conclusion

The Sevier County Citizens For Clean Air And Water respectfully request the Presiding Officer to extend the February 18th, 2005 date to April 15th, 2005. This request is made in the interest of justice to the many members of the Sevier County Citizens For Clean Air And Water. Several of these members are to ill to leave their home and personal contact must be made.

Dated this 2nd day of February, 2005

James O. Kennon

James O, Kennon, President
Sevier County Citizens For Clean Air And Water
146 North Main Street, Suite 27
P.O. Box 182
Richfield, Utah 84701
Telephone: [435] 896-2822
Fax [435] 638-7371

Certification of Service

I hereby certify that on this 2nd day of February, 2005, I caused a copy of the foregoing Request to the Presiding Officer to be mailed by United States Mail, postage paid to the following:

Joro Walker
Sean Phelan
Western Resource Advocates
1473 S 1100 E, Suite F
Salt Lake City, Utah 84105

Rick Sprott, Executive Secretary
Utah Division of Air Quality
150 North 1950 West
Salt Lake City, Utah 84114

Chris Stephens
Assistan Atttorney General
150 North 1950 West
Salt Lake City, Utah 84114

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160 E 300 S
Salt Lake City, Utah 84114

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Counsel, Utah Air Quality Board
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Salt Lake City, Utah 84114-0873

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IPP &

SEVIER POWER

NSR Schedule 3-4-05

Schedule for Adopting PSD Reform Provisions: 3/4/05

Milestone	Completion Date
Draft PSD rule revision for internal DAQ review	June, 2004
Outreach/Review of NSR reform provisions for external stakeholders	June, 2004
Draft Core Permitting rule (minor source program) for internal DAQ review	December, 2004
Present conceptual proposal for how to integrate NSR reform provisions into Utah's rules to stakeholders	March 23, 2005 Utah State Tax Commission Rm 1036 210 North 1950 West SLC 1:30 PM – 3:00 PM
Draft rules for stakeholder review	April, 2005
Air Quality Board Approval for Comment	July, 2005
Public Comment Period	August, 2005
Air Quality Board Final Adoption	November, 2005
UDAQ submits revised rules to EPA	December, 2005
SIP Revision due to incorporate NSR Reform Provisions	January 2, 2006

Note 1: This schedule allows two months between the end of the comment period and the final adoption by the Board in case there are significant comments received.

Note 2: The NSR reform provisions have been challenged. Court decisions could potentially affect the schedule for implementing the provisions in Utah.

Schedule for Adopting NAA NSR Reform Provisions: 3/4/05

Note: UDAQ is unable to move forward with revising R307-403 until EPA finalizes changes to Appendix S and issues implementation guidance for the 8-hour ozone and $PM_{2.5}$ standards. However, we do not believe this will be a problem because all areas in Utah will soon be redesignated to attainment. Maintenance plans have been submitted, or are close to being completed for all remaining nonattainment areas in the state. Therefore, we have focused our efforts on the PSD program.

Milestone	Completion Date
Draft NAA NSR rule revision for internal DAQ review (note: 40 CFR 51.165 has major gaps that are addressed by Appendix S – this portion of the rule has not yet been finalized by EPA)	June, 2004
Outreach/Review of NAA NSR reform provisions for external stakeholders	June, 2004
EPA Finalize Revisions to Appendix S and 40 CFR 52.24	Unknown – Spring 2005? Tied to Phase 2 of ozone implementation guidance and $PM_{2.5}$ implementation guidance
New draft NAA NSR rule revision for internal DAQ review that incorporates Appendix S changes and addresses 8-hour ozone and $PM_{2.5}$	3 months after EPA releases guidance
Outreach/Review of Appendix S, 8-hour ozone, and $PM_{2.5}$ changes for external stakeholders	4 months after EPA releases guidance
Draft rules for stakeholder review	5 months after EPA releases guidance
State/Board Approval for Comment	7 months after EPA releases guidance
Administrative: State Final Approval	11 months after EPA releases guidance
UDAQ Submits Document to EPA	12 months after EPA releases guidance
SIP Revision due to incorporate NSR Reform Provisions	January 2, 2006

2 sided

State of Utah

Department of Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

DAQC-199-2005

MEMORANDUM

TO: Air Quality Board

FROM: Richard W. Sprott, Executive Secretary

DATE: February 8, 2005

SUBJECT: Compliance Activities – January 2005

Annual Inspections Conducted:

A	6
SM	12
B	13

Initial Compliance Inspections Conducted:

A	0
SM	0
B	0

On-Site stack test audits conducted: 0
Stack test report reviews: 20

On-site CEM audits conducted: 1
Emission reports reviewed: 9

Oxy fuels inspections conducted: 0

[1]Miscellaneous inspections conducted. 12

1950 North 1950 West • PO Box 144820 • Salt Lake City, UT 84114-4820 phone (801) 536-4000 • fax (801) 536-4099
T.D.D. (801) 536-4414 • www.deq.utah.gov

Complaints received: 31

VOC inspections:

Tankers 0
Degreasers 6
Paint Booths 31

Source Compliance Action Notice issued 3

Notices of Violation issued 3

Compliance Advisories issued 7

Settlement Agreements resolved 4

Penalties Collected $10,359.40

Notices of Violations issued:

George Ansley
Jose Gallegos
Walter Mullins

Compliance Advisories issued:

Westinghouse Electric Co.
Fetzer's, Inc.
Pine Factory
Great Salt Lake Minerals
Globeground/Servisair
Kennecott Utah Copper Corp.
Merit Energy Co.

Settlement Agreements Reached:

Dave Gallegos $0.00
Westbrook Construction $2,734.40
Western Rock Products $7,600.00
Walter Mullins $25.00

[1]Miscellaneous inspections include, e.g., surveillance, level I inspections, complaints, on-site training, tanker vapor certifications, dust patrol, smoke patrol, open burning, etc.

State of Utah

Department of Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

OLENE S. WALKER
Governor

GAYLE F. McKEACHNIE
Lieutenant Governor

DAQC-071-2005

MEMORANDUM

TO: Air Quality Board

FROM: Richard W. Sprott, Executive Secretary

DATE: January 13, 2005

SUBJECT: Compliance Activities – December 2004

Annual Inspections Conducted:

A	7
SM	5
B	11

Initial Compliance Inspections Conducted:

A	0
SM	1
B	1

On-Site stack test audits conducted: 1
Stack test report reviews: 5

On-site CEM audits conducted: 0
Emission reports reviewed: 0

Oxy fuels inspections conducted: 0

[1]Miscellaneous inspections conducted 8

Complaints received: 23

150 North 1950 West • PO Box 144820 • Salt Lake City, UT 84114-4820 • phone (801) 536-4000 • fax (801) 536-4099
T.D.D. (801) 536-4414 • www.deq.utah.gov

VOC inspections:

Tankers	0
Degreasers	11
Paint Booths	31

Source Compliance Action Notice issued 3

Notices of Violation issued 0

Compliance Advisories issued 3

Settlement Agreements resolved 6

Penalties Collected $47,916.80

Notices of Violations issued: None

Compliance Advisories issued:

Trans Jordan Landfill
Kennecott Utah Copper
Highland Development, Inc.

Settlement Agreements Reached:

CraCar Construction Co.	$2,062.40
University of Utah	$28,800.00
Brown Bros. Construction	$3,120.00
Harper Contracting	$5,600.00
West Valley Sand & Gravel	$5,600.00
Newman Construction	$2,734.40

[1]Miscellaneous inspections include, e.g., surveillance, level I inspections, complaints, on-site training, tanker vapor certifications, dust patrol, smoke patrol, open burning, etc.

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Cache Valley PM 2.5 data for 2005

(preliminary, 24-hr. samples in $\mu g/m^3$):
[exceedances of the 24-hr. standard of 65 $\mu g/m^3$ in **bold**]

January:	Logan ref:	Logan FDMS:	Amalga:	Hyrum:
1	7.0	5.3	4.3	5.4
2	13.4	11.4		
3	25.0	22.8		
4	9.9	8.4	13.6	10.0
5	9.6	8.2		
6	9.5	9.5		
7	6.8	5.4	9.0	3.7
8	1.2	-1.3		
9	8.0	9.8		
10	8.5	7.6	7.5	3.7
11	6.7	4.8		
12	8.0	5.4		
13	16.5	14.8	10.1	3.5
14	34.0	32.7		
15	49.9	50.6		
16	**72.9**	**76.0**	**69.7**	**70.0**
17	**87.0**	**87.1**		
18	**73.9**	**80.4**		
19	51.2	54.9	46.2	37.4
20	42.2	42.9		
21	29.9	30.2		
22	24.3	23.1	21.4	23.1
23	31.2	31.1		
24	50.3	49.7		
25	35.5	34.8	31.1	xx
26	29.5	28.4		
27	48.6	49.2		
28	55.3	57.1	48.4	49.4
29	47.5	45.1		
30	12.1	10.0		
31	14.5	11.4	12.2	xx

Cache Valley PM 2.5 data for 2005 (preliminary, 24-hr samples in $\mu g/m^3$):

February:	Logan ref:	Logan FDMS:	Amalga:	Hyrum:
1	22.6	22.1		
2	25.9	24.8		
3	40.9	40.7	33.2	30.9
4	60.4	62.9		
5	**77.4**	**83.0**		
6	17.5	18.1	26.2	11.9
7	26.1	26.7		
8	24.8	27.4		
9	32.4	36.9	40.8	18.9
10	42.9	48.3		
11	48.7	52.9		
12	48.4	52.9	43.4	40.2
13	25.6	28.0		
14	6.2	8.2		
15	9.7	12.4	xx	5.2
16	25.8	28.9		
17	44.2	49.1		
18	57.0	61.6	xx	39.4
19	39.2	41.9		
20	11.3	12.8		
21	22.9	25.6	18.8	xx
22	28.6	31.4		
23	35.2	38.0		
24	48.4	51.2	44.1	29.4
25	45.6	49.3		
26	53.5	57.2		
27	56.7	59.9	50.4	44.0
28	55.1	58.5		

Cache Valley PM 2.5 data for 2005 (preliminary):

March:	Logan ref:	Logan FDMS:	Amalga:	Hyrum:
1	*	56.5	*	*
2	*	37.6	*	*
3	*	54.2	*	*
4	*	**73.1**	*	*
5	*	36.0	*	*
6	*	36.1	*	*
7	*	51.3	*	*
8	*	**75.2**	*	*

(* indicates filters not yet analyzed)

Ranked values (Jan. 1 – March 8; 24-hr. samples in $\mu g/m^3$):

1.	**87.0**	(1/17)	
2.	**77.4**	(2/05)	
3.	**75.2†**	(3/08)	
4.	**73.9**	(1/15)	
5.	**73.1†**	(3/04)	
6.	**72.9**	(1/16)	
7.	60.4	(2/04)	
8.	57.0	(2/18)	(current 98th percentile)
9.	56.7	(2/27)	

(† indicates FDMS value; filters for these dates not yet analyzed)

[98th percentile value will be the 8th ranked value for the calendar year if data capture is at least 96.2 %, or 351 daily samples; otherwise it is the 7th ranked value]

Max. 98th percentile allowable for 2005 (to avoid a violation): 63.4 $\mu g/m^3$

Max. **combined** allowable 98th percentile for 2005 - 2006: 47 $\mu g/m^3$
(If 2005 98th percentile value is approx. 57, this means that the 2006 98th percentile value cannot be more than 37, since the low year of 2003 is dropped from the calculations).

(C:temp/cachevalleypm25d)

UTAH STATE DIVISION OF AIR QUALITY

47mm Partisol: PM10 Concentration Adjusted to Sea Level (24-hr average) In Micrograms per Cubic Meter

2005 February

Date	Cottonwood	Hawthorn	Lindon	Logan 4	Magna(W)	Moab	NProvo	NProvo-X	NSL	NSL-X	Ogden2
02/01		26	32						24		21
02/02		36	42						34		25
02/03	41	50	65	52	32		44	46	49	54	35
02/04		47	21						77		54
02/05		33	24						38		38
02/06	17	18	11	23	9		22		19		15
02/07		15	13						18		20
02/08		22	12						31		33
02/09	35	39	40	46	25		22	21	55	60	32
02/10		56	40						70		38
02/11			65						72		41
02/12	38	40	15	55	29		17		34		27
02/13		14	7								29
02/14		12	3						14		9
02/15	15	11	13	14	12		10	9	16	17	11
02/16		27	31						27		24
02/17		42	37						50		34
02/18	69	60	62	75	43		59		61		51
02/19		16	5						23		22
02/20		5	1						13		5
02/21		14	13	30			9	7	24	28	19
02/22		25	18						47		26
02/23			20								
02/24			25				19				
02/25			19								
02/26			19								
02/27			17		20						
02/28											
Arith Mean	36	29	25	42	24		25	21	38	40	28
Max 24-hr Avg	69	60	65	75	43		59	46	77	60	54
Std. Dev	20	16	18	21	12		17	18	20	20	13
Days of Data	6	21	27	7	7		8	4	21	4	22
Days >150											
Yearly Avg	29	26	26	24	22		22	23	40	46	25

UTAH STATE DIVISION OF AIR QUALITY

47mm Partisol: PM10 Concentration Adjusted to Sea Level (24-hr average) in Micrograms per Cubic Meter

2005 January

Date	Cottonwood	Hawthorn	Lindon	Logan 4	Magna(W)	Moab	NProvo	NProvo-X	NSL	NSL-X	Ogden2
01/01	7	12	4		6				14		7
01/02		18	20						16		18
01/03		30	25						32		
01/04	24	24	25	9	20			23	26	28	13
01/05		17	17						19		15
01/06		17	18						17		13
01/07	13	18	12	14	16			11	25		17
01/08		7	6						10		9
01/09		7	2						7		19
01/10	10	17	5	9	6			5	18	17	11
01/11		10	5						11		9
01/12		15	13						18		11
01/13	25	29	22	23	15			13	25		28
01/14		39	35						47		41
01/15		55	23						50		48
01/16	50	59	25	88	46			20	49	51	51
01/17			56						54		52
01/18			53						56		54
01/19	57		55	66	46			34	72		64
01/20		65	61						55		50
01/21		45	65						33		38
01/22	46	48	33	24	23			28	39	38	28
01/23		60	47						49		29
01/24		56	45						45		33
01/25	59	58	55	41			46		54		33
01/26		60	59						43		29
01/27		32	24						23		26
01/28	19	26	18	59	16		11	16	26	29	23
01/29		23	14						19		19
01/30		15	18						13		10
01/31	14	26	26	17	11		20		29		15
Arith Mean	29	32	29	35	20		26	19	32	33	27
Max 24-hr Avg	59	65	65	88	46		46	34	72	51	64
Std. Dev	20	19	19	27	15		18	10	17	13	16
Days of Data	11	28	31	10	10		3	8	31	5	30
Days >150											
Yearly Avg	29	26	26	24	22		22	23	40	46	25

UTAH STATE DIVISION OF AIR QUALITY

PM2.5 Actual Concentration (24-hr average) in Micrograms per Cubic Meter

2005 February

Date	AG	BR	BV	CW	HE	HG	HV	HW	HY	L4	X4	LN	LX	MG	N2	NP	O2	SF	SW	WT	WX	WV	VX
02/01								10.9			22.8	18.1			11.0								
02/02								16.5		25.9	25.8	23.4			18.5								
02/03	33.2	21.2	23.5	29.0	21.3	29.6	20.2	25.7	30.9	40.9	40.7	29.5	30.3	18.1		29.1	20.6	26.2	11.0	23.1	17.4	24.3	24.6
02/04								29.9			60.4	13.7			40.9								
02/05								17.2			77.4	9.2											
02/06	26.2	8.7	10.1	11.8	10.1	12.6	7.1	10.5	11.9		17.5	14.6		6.0		13.8	7.8	12.6	9.0	6.6		10.2	
02/07								14.1			26.1	7.0											
02/08								12.3			24.6	9.9											
02/09	40.8	11.9	14.2	2.9	12.5	9.7	19.6	16.6	16.9		32.4	12.9	12.6	14.1	5.4	11.6	17.4	9.0		14.7	15.2	21.2	21.5
02/10								32.5			42.9				37.5								
02/11											48.7	15.8			44.5								
02/12	43.4	21.0	23.8		16.7	9.2	16.5	35.5	40.2		48.4	16.5		26.4	29.0	16.1	24.0	12.2		19.9		29.4	
02/13								9.5		25.6	24.5	6.3			13.9								
02/14								6.5			8.2	3.5			7.0								
02/15		3.3	4.2		5.6	4.6	4.1		5.2		9.7		7.6	4.9	5.3	7.8	5.9	5.8		5.1	5.2	5.7	5.6
02/16										25.8	25.8				13.8								
02/17										44.2	43.1	21.6			27.1								
02/18		26.0	33.2		39.7	36.2	25.8	36.2	39.4	57.0	55.7	36.7		30.9	37.2	41.5	28.5	44.0		26.5		36.6	
02/19								6.0		39.2	36.7	3.7			8.7								
02/20								2.3		11.3	11.0				4.7								
02/21	18.8		6.5		2.0	2.9	11.4	10.9		22.9	22.9	6.4	6.1	3.9	8.7	6.5	12.7	2.7		10.9	11.0	5.8	12.5
02/22										28.6	28.5	6.5			18.8								
02/23										35.2	35.3	10.5			16.1								
02/24	44.1	7.1	9.3		8.1	7.4	8.6		29.4	48.4	44.7	9.3		8.2	15.4	7.4	9.9	6.2		8.6		12.3	
02/25										45.6	44.8	7.5			19.4								
02/26										53.5	52.7	9.7			19.7								
02/27	50.4	20.2	9.2		8.2	7.0	13.6		44.0	58.7	55.5	10.1	10.5	9.3	14.5	10.1	12.6	6.3		11.9	12.2	12.5	
02/28										55.1	54.3				15.6								
Arith Mean	36.7	14.7	14.9	14.6	13.8	13.3	14.3	16.7	27.5	38.5	36.4	13.2	13.4	13.5	18.9	15.9	15.5	13.9	10.0	14.1	12.2	17.6	14.1
Max 24-hr Avg	50.4	26.0	33.2	29.0	39.7	36.2	25.8	36.2	44.0	57.0	77.4	36.7	30.3	30.9	44.5	41.5	28.5	44.0	11.0	26.5	17.4	36.6	
Std.Dev	11.2	8.4	9.7	13.3	11.3	11.6	7.1	10.8	14.2	14.0	17.0	8.2	9.8	9.7	11.8	11.9	7.7	13.2	1.4	7.5	4.8	10.9	8.7
Days Data	7	8	8	3	9	9	9	16	8	16	28	23	5	9	23	9	9	9	2.0	9	5	9	5
Yearly Mean	25.0	8.7	11.5	12.2	9.1	8.9	9.9	12.4	21.2	12.9	11.4	10.7	9.8	9.7	17.2	10.0	11.5	8.4	7.7	9.9	10.3	12.2	11.2

UTAH STATE DIVISION OF AIR QUALITY

PM2.5 Actual Concentration (24-hr average) in Micrograms per Cubic Meter

2005 January

Date	AG	BR	BV	CW	HE	HG	HV	HW	HY	L4	X4	LN	LX	MG	N2	NP	O2	SF	SW	WT	WX	WV	VX
01/01	4.3	5.7	7.2	6.2	2.6	3.1	5.9	8.4	5.4	7.0	7.5	3.7		2.8	6.7	4.5	6.5	2.3	13.3	6.0		5.0	14.8
01/02								10.1		13.4	13.3	10.6											
01/03								14.2		25.0	25.3	13.0											
01/04	13.6		12.5	17.2	12.8	12.2	3.9	12.9	10.0	9.9	10.0	17.4	17.5	15.7	20.1	15.6	6.7	17.4	0.7	7.1	7.3	15.2	
01/05								7.2		9.6	10.0	13.6											
01/06								12.6		9.5	9.8	14.4			11.6								
01/07	9.0	4.5	7.4	6.9	3.3	5.4	5.1	6.9	3.7	5.6	7.0	6.1		2.4	9.4	6.5	7.3	3.6	3.3	4.3		5.7	7.0
01/08								1.0		1.2	1.2	1.3			3.0								
01/09								1.6		8.0		1.2			4.6								
01/10	7.5	3.8	6.7	9.5	5.0	1.7	6.1	11.5	3.7	8.5		2.9	2.8	4.5	11.4	5.0	7.6	3.0	0.8	7.0	7.1	7.2	
01/11								5.2		6.7		1.3			13.9								
01/12								7.2		8.0		5.3			8.0								
01/13	10.1	4.4	6.2	10.1	3.0	3.2	6.6	7.3	3.5	16.5		6.7		3.2	8.6	6.2	11.1	5.5	10.1			7.6	
01/14								16.0		34.0		11.5			22.5								
01/15								35.6		49.9		10.6			40.2								
01/16	69.7	34.1		35.9	19.6	11.7	36.8	38.3	70.0	72.9		13.9	14.4	38.7	39.2	23.7	37.5		2.0	31.2	31.3	37.6	
01/17								34.2		87.0		33.1			37.4								
01/18								32.7		73.9		28.4			37.4								
01/19	46.2	37.6	38.6	37.2	19.7	17.1	38.0	38.1	37.4	51.2		23.3		50.3	46.5	19.9	42.4	21.2	14.8	34.3			
01/20								45.4		42.2		27.9			43.2								
01/21								34.9		29.9		36.2			29.0								
01/22	21.4	21.3	22.6	37.6	16.9	23.9	23.5	36.2	23.1	24.3		25.7	25.9	22.0	32.3		27.8	23.3	1.7	23.8	24.6	27.7	28.5
01/23								45.6		31.2		34.1			42.2	30.6							
01/24								39.5		50.3		31.7			36.0								
01/25	31.1	20.5	31.3	42.0	27.4	33.7	23.3	39.7		35.5		37.2		24.5	39.7	35.7	28.0	32.4	9.7	28.0		38.9	
01/26								41.6		29.5		39.3			32.3								
01/27								22.4		48.8	50.3	18.3			20.6								
01/28	48.4	12.2	15.5	11.9	7.2	6.7	13.0	13.4	49.4	55.3	55.8	7.1	6.8	13.3	17.4	5.8	18.1		5.3	18.1	18.0		
01/29								15.5			47.5	8.1			16.1								
01/30								7.9			12.1	12.2			7.6								
01/31	12.2	8.2	9.8	11.1	6.6	10.3	7.7	11.9			14.5	12.1		6.3	12.7	10.6	9.3	9.4	6.3	7.4		9.5	
Arith Mean	24.9	15.0	16.0	20.4	11.3	11.7	15.4	21.1	22.9	30.2	20.3	16.5	13.5	16.5	23.2	15.1	18.4	13.2	6.2	16.3	17.3	17.2	16.8
Max 24-hr Avg	69.7	37.6	38.6	42.0	27.4	33.7	38.0	45.6	70.0	87.0	55.8	38.3	25.9	50.3	46.5	35.7	42.4	32.4	14.8	34.3	31.3	38.9	28.5
Std Dev	21.3	12.6	11.3	14.5	8.5	9.9	12.8	14.8	24.3	23.6	18.5	12.0	9.1	15.7	14.1	11.0	13.3	10.8	5.1	11.5	10.6	13.9	10.9
Day Date	11	10	10	11	11	11	11	31	9	28	13	31	5	11	28	11	11	9	11.0	10	5	9	3
Yearly Mean	20.2	8.2	11.1	12.1	6.8	8.5	9.4	12.0	17.6	11.0	8.3	10.5	9.4	9.4	16.7	9.4	11.1	7.8	7.7	9.4	10.1	11.7	10.8

Amend

307-110-10

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

DAQ-014-2005

MEMORANDUM

TO: Air Quality Board

THROUGH: Richard W. Sprott, Executive Secretary

THROUGH: Cheryl Heying, Planning Branch Manager

THROUGH: Dave McNeill, SIP Branch Manager

FROM: Bill Reiss

DATE: March 1, 2005

SUBJECT: Re: Propose for Public Comment: Amend R307-110-10 and Add a New SIP subsection IX.A.10, PM_{10} Maintenance Plan for Utah County, Salt Lake County, and Ogden City; Repeal and Re-enact R307-110-17 and SIP Section IX.H, Emission Limits

General Overview:

For several years, the staff has been working with our stakeholders along the Wasatch Front to develop a Maintenance Plan for the PM_{10} non-attainment areas of Salt Lake County, Utah County, and Ogden City. The attached document is the culmination of that process. This SIP was developed based on the application of a photo-chemical grid model (UAM-AERO) that demonstrates that all areas along the Wasatch Front will maintain compliance with the PM_{10} National Ambient Air Quality Standard (NAAQS) through 2017. That maintenance is based on the implementation of rules contained in Agenda Items V and VI. When this plan is submitted to EPA, the State will simultaneously request redesignation to attainment for each area. Once EPA publishes redesignation for an area, the federal Prevention of Significant Deterioration (PSD) program will be effective in that area and the New Source Review (NSR) and offset provisions for major and minor sources will be continued as state-only programs.

The proposal also includes a revised Section IX.H, which includes the specific requirements for major industrial sources along the Wasatch Front.

Staff Recommendation:

Staff recommends that the attached documents be proposed for public comment with the following important considerations.

Important Considerations:

It is important to remember the following when reviewing this document:

1. State approval of this document does not constitute a redesignation of these areas. Redesignation of each area occurs when EPA approves this Maintenance Plan and publishes a redesignation notice in the Federal Register. PSD requirements will not take effect in the current non-attainment areas until the redesignation occurs.

2. Section IX.H includes a significant reduction in the number of sources with SIP-specified limits, and includes a provision to allow for changes to permit conditions through the Title V permit process. This language is specifically contained in paragraph 3 of Section IX.H.

3. Just prior to the completion of the attached draft of the SIP, the two Municipal Planning Organizations (MPOs) - Wasatch Front Regional Council and Mountainlands Association of Governments - requested that the Conformity Budget Section be revised to include higher emissions than were used in the modeling that supports this plan. Those higher emissions would allow the MPOs to consume part of the "safety margin" that was identified by the model. This procedure is expressly provided for in EPA's conformity regulation (40 CFR 93.124); however, the authority to grant such a portion of a safety margin rests with the Utah Air Quality Board. The results of the modeling to determine whether maintenance of the PM_{10} standards through 2017 is still predicted with these additional emissions will not be available until the Board convenes on March 9. For this reason, the document has been prepared to include a choice:

   a) Assuming the results are positive, DAQ staff would recommend that the Board propose the maintenance plan for public comment with the paragraph labeled Alternative 1 for each specific budget. In that paragraph, the bolded italicized ***XXX***, ***YYY***, **and** ***ZZZ*** would be replaced with the actual values representing (respectively): the highest predicted concentration, the safety margin between that value and the PM_{10} standard, and that portion of the safety margin that would be allocated to the mobile vehicle emissions budget.

   Also, Figures 41, 42, and 43 (on pages 31-33), which indicate the highest concentrations predicted by the model, would be replaced by new figures reflecting the larger emission budgets.

   b) If, however, the new modeling results do not show maintenance of the PM_{10} standards through 2017, DAQ staff would recommend that the Board propose the maintenance plan for public comment with **either** Alternative 1 or Alternative 2 **or both**. In such case, additional modeling could be done during the comment period to determine the appropriate values for ***XXX***, ***YYY***, and ***ZZZ*** in Alternative 1.

R307. Environmental Quality, Air Quality.
R307-110. General Requirements: State Implementation Plan.
R307-110-10. Section IX, Control Measures for Area and Point Sources, Part A, Fine Particulate Matter.

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part A, Fine Particulate Matter, as most recently amended by the Utah Air Quality Board on [~~July 3, 2002~~]July 6, 2005, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

KEY: air pollution, PM10, PM2.5, ozone
[~~January 4~~]September 2, 2005 **19-2-104(3)(e)**
Notice of Continuation March 27, 2002

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R307. Environmental Quality, Air Quality.
R307-110. General Requirements: State Implementation Plan.
R307-110-17. Section IX, Control Measures for Area and Point Sources, Part H, Emissions Limits.

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part H, Emissions Limits, as most recently amended by the Utah Air Quality Board on [~~June 5~~]July 6, 200[~~2~~]5, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

KEY: air pollution, PM10, PM2.5, ozone
[~~January 4~~]September 2, 2005 **19-2-104(3)(e)**
Notice of Continuation March 27, 2002

Utah State Implementation Plan

Emission Limits and Operating Practices

Section IX, Part H

Adopted by the Air Quality Board
[~~June 5, 2002~~]June 1, 2005

IX.H EMISSION LIMITS AND OPERATING PRACTICES

(Adopted 24 September 1990 and updated June 28, 1991; February 27, 1997; July 3, 2002; and June 1, 2005.)

IX.H.1 General Requirements.

The terms and conditions of this Subsection IX.H.1 shall apply to all sources subsequently addressed in Subsection IX.H.2. Should any inconsistencies exist between these two subsections, the source-specific conditions listed in IX.H.2 shall take precedence.

a. Stack testing to show compliance with the emission limitations for the sources in this appendix shall be performed in accordance with 40 CFR 60, Appendix A; 40 CFR 51 Appendix M; and R307-305-5. The back half condensibles are required for inventory purposes. The following test methods shall be used for the indicated air contaminants:

(1) PM_{10} For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a plus the back half condensibles using Method 202, or other appropriate EPA approved reference method.

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, 5e, plus back half condensibles using method 202, or other appropriate EPA approved reference method. All particulate captured in the back half shall be considered PM_{10}.

The PM_{10} captured in the front half shall be considered for compliance purposes.

(2) SO_2 Appendix A, Method 6, 6A, 6B or 6C

(3) NO_X Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E

(4) Sample Location Appendix A, Method 1

(5) Volumetric Flow Rate Appendix A, Method 2

(6) Calculations To determine mass emission rates, the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors to give the results in the specified units of the emission limitation.

Notification of the test date shall be provided at least 30 days prior to the test. A pretest conference shall be held if directed by the Executive Secretary. The emission point shall be

comply with all applicable sections of R307-170 and 40 CFR 60, Appendix B, Specification 7.

If the monitor reading is not available, the refinery plant gas shall be sampled as closely to the monitor location as safely possible at least once each day. The sample shall be analyzed for sulfur content by use of a chemical detector tube capable of reading the required concentration (e.g., Drager Hydrogen Sulfide No. 1/D or equivalent).

For natural gas, compliance is assumed while the fuel comes from a public utility.

(c) no longer burn fuel oil in external combustion equipment, except during periods of natural gas curtailment or as specified in IX.H.2.

(d) achieve an emission rate equivalent to no more than 9.8 kg of SO_2 per 1,000 kg of coke burn-off from any Catalytic Cracking unit by use of low-SOx catalyst or equivalent emission reduction techniques or procedures, including those outlined in 40 CFR 60, Subpart J. Unless otherwise specified in IX.H.2, compliance shall be determined daily based on a rolling seven-day average.

(e) not exceed 20% opacity at any process flare. Opacity at catalytic cracking units shall not exceed 20%, with compliance to be determined in accordance with Subsection (g) above. Alternatively, a Continuous Opacity Monitoring System (COMS) may be used, in which case the limit shall be 30% in accordance with 40 CFR 63, Subpart UUU.

(2) Compliance Demonstrations.

(a) Compliance with the maximum daily (24-hr) plant-wide emission limitations for PM_{10}, SO_2, and NO_X shall be determined by adding the calculated emission estimates for all fuel burning process equipment to those from any stack-tested or CEM-measured source components.

(b) Daily emission estimates for stack-tested source components shall be made by multiplying the latest stack-tested hourly emission rate times the logged hours of operation (or other relevant parameter) for that source component for each day. This shall not preclude a source from determining emissions through the use of a CEM that meets the requirements of R307-170.

(c) The sulfur dioxide concentration in the flue gas of Sulfur Recovery Units shall be determined by a continuous emission monitor that meets or exceeds the requirements contained in 40 CFR 60, Appendix B, Performance Specification 2. The monitor shall be maintained and calibrated in accordance with R307- 170. The mass flow rate of the flue gas shall be determined by a volumetric flow measurement device that meets or exceeds the requirements contained in 40 CFR 52 Appendix E.

(d) Any parameters necessary to determine compliance, including but not limited to: CEM data, fuel gas meter readings, hours of operation for stack-tested source components, and the calculated emissions, shall be recorded on a daily basis. These records shall be kept for a minimum of five years. Any or all of these records shall be made available to the Executive Secretary upon request.

IX.H.2 Source-Specific Particulate Emission Limitations

a. BOUNTIFUL CITY POWER

(1) (a) NO_X emissions from the 5.3 MW Turbine Exhaust Stack shall not exceed 0.0721 tons per day.

(b) Annual NO_X emissions from the entire plant shall not exceed 248.00 tons per rolling 12-month period. Combined emissions shall be the sum of emissions from natural gas fired turbine and each internal combustion engine.

Compliance with the mass emission limits shall be demonstrated by multiplying the most recent stack test results, for the turbine and each engine, by the total hours of operation along with any necessary conversion factors. Compliance with the annual limitation shall be based on a rolling 12-month total. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

(2) Engine #8 shall be retested to verify the emissions factors after every 800 operating hours, or at least once every 24 months. All other engines and the turbine shall be tested once a year. Emission testing for NO_X shall be performed using a portable monitoring system.

(3) If the annual NO_X emissions for the entire plant exceed 200 tons for any previous 12-month period, the owner/operator shall submit a report of the emissions to the Executive Secretary within 30 days. Within 90 days the owner/operator shall submit to the Executive Secretary for approval, a plan with proposed specifications for the installation, calibration, and maintenance of a Continuous Emissions Monitoring System (CEMS) for NO_X. The CEMS shall be on line within 12 months following the approval of the plan.

(4) Visible emissions shall be no greater than 10 percent opacity except for 15 minutes at start-up and 15 minutes at shutdown and during allowed straight fuel oil use. When straight fuel oil is used, visible emissions shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour.

c. CHEVRON PRODUCTS CO.

(1) PM_{10} Emissions

DAILY LIMIT: Combined emissions of PM_{10} from all fuel burning process equipment, as well as the FCC CO Boiler and Catalyst Regenerator but not including the Reformer Compressor Drivers, shall be no greater than 0.234 tons per day.

Except for the FCC CO Boiler and Catalyst Regenerator, compliance with the daily PM_{10} limit shall be determined daily by multiplying the quantity of each fuel burned at the affected units by the appropriate emission factor for that fuel, and summing the results.

The PM_{10} emission factor for the FCC CO Boiler and Catalyst Regenerator shall be determined by a stack test at least once every three years.

(2) SO_2 Emissions

(a) Cap Sources:

(i) *DAILY LIMIT:* Combined emissions of sulfur dioxide from all fuel burning process equipment, as well as the FCC CO Boiler and Catalyst Regenerator, shall not exceed 2.977 tons/day.

SO_2 emissions for the fuel burning process units shall be determined by applying the appropriate emission factors to the relevant quantities of fuel combusted.

The SO_2 emission factor for the FCC CO Boiler and Catalyst Regenerator shall be determined by a stack test at least once every three years. Compliance with Subsection IX.H.1.h(1)(d) shall be determined as part of each test.

Alternatively, SO_2 emissions from the FCC CO Boiler and Catalyst Regenerator may be determined using a Continuous Emissions Monitor (CEM) that meets the requirements of R307-170.

(ii) *12-MONTH LIMIT:* Emissions of SO_2 from all fuel burning process equipment, as well as the FCC CO Boiler and Catalyst Regenerator, shall be no greater than 953.9 tons per rolling twelve-month period.

(b) Sulfur Recovery Unit (SRU):

Emissions of SO_2 from the SRU shall not exceed 2.128 tons/day.

Daily SO_2 emissions from the SRU Tail Gas Incinerator (TGI) shall be determined by multiplying the SO_2 concentration in the flue gas by the mass flow of the flue gas.

Whenever the SO_2 CEM is bypassed for short periods, SO_2 CEM data from the previous three days will be averaged and used as an emission factor to determine emissions.

d. FLYING J INC., BIG WEST OIL CO.

(1) PM_{10} Emissions

(a) *DAILY LIMIT:*

(i) Combined emissions of PM_{10} from all fuel burning process equipment, including the SRU Tail Gas Incinerator and the Catalyst Regeneration System, shall not exceed the following:

(A) 0.377 tons per day, between October 1 and March 31;
(B) 0.407 tons per day, between April 1 and September 30.

(ii) PM_{10} emissions for the fuel burning process units shall be determined by applying the appropriate emission factors to the relevant quantities of fuel combusted in each unit.

The daily primary PM_{10} contribution from the Catalyst Regeneration System shall be calculated using the following equation:

Emitted PM_{10} = (Feed rate to FCC in kbbl/time) * (22 lbs/kbbl)

wherein the emission factor (22 lbs/kbbl) may be re-established by stack testing.

Total 24-hour PM_{10} emissions shall be calculated by adding the daily emissions from the fuel burning process equipment to the estimate for the Catalyst Regeneration System.

(b) *12-MONTH LIMIT:* PM_{10} emissions from all sources shall not exceed 71 tons. Compliance shall be based on a rolling 12-month total.

(2) SO_2 Emissions

(a) Plantwide

(i) Daily Limit: Combined emissions of sulfur dioxide from all fuel burning process equipment, including the SRU Tail Gas Incinerator and the Catalyst Regeneration System but not including the IC Backup Reformer Compressors, shall not exceed the following limits:

(A) 2.764 tons/day, between October 1 and March 31;
(B) 3.639 tons/day, between April 1 and September 30.

(ii) SO_2 emissions for the fuel burning process units shall be determined by applying the appropriate emission factors to the relevant quantities of fuel combusted.

The daily SO_2 emission from the Catalyst Regeneration System shall be calculated using the following equation:

SO_2 = [43.3 lb SO_2/hr / 7,688 bbl feed/day] x [(operational feed rate in bbl/day) x (wt% sulfur in feed / 0.1878 wt%) x (operating hr/day)]

Total 24-hour NO_X emissions shall be calculated by adding the daily emissions from the fuel burning process equipment, including the Backup Reformer Compressors, to the value for the Catalyst Regeneration System.

(b) *12-MONTH LIMIT:* NO_X from all fuel burning process equipment, including the IC Backup Reformer Compressors and the Catalyst Regeneration System, shall not exceed 396.7 tons per rolling 12-month period.

f. GENEVA ROCK PRODUCTS, OREM PLANT

(1) During the period from November 1 to the last day in February, inclusive, emissions to the atmosphere from the indicated emission point shall not exceed the following rates and concentrations:

Asphalt Plant Baghouse Stack (APBH)

(a) PM_{10} 0.103 tons/day
(b) NO_X 0.568 tons/day
(c) SO_X 0.484 tons/day

Compliance with the daily mass emission limits shall be demonstrated by multiplying the most recent stack test results, along with any necessary conversion factors, by the appropriate hours of operation for each day. Hours of operation shall be determined by supervisor monitoring and maintaining an operations log.

(2) Stack testing shall be performed as specified below:

EMISSION POINT	*POLLUTANT*	*TEST FREQUENCY*
Asphalt Plant	PM_{10}	3 years
	NO_X	3 years
	SOx	3 years

(3) Opacity observations of emissions from the Asphalt Plant shall be conducted at least once every 12 months.

h. HOLLY REFINING AND MARKETING CO.

(1) PM_{10} Emissions

DAILY LIMIT:

Combined emissions of PM10 from all fuel burning process equipment, including the Sulfur Recovery Unit Tail Gas Incinerator, shall be no greater than 0.444 tons per day.

PM_{10} emissions for the fuel burning process units shall be determined by applying the appropriate emission factors to the relevant quantities of fuel burned.

Compliance with the daily mass emission rate from the (51-6) CO Boiler shall be demonstrated by multiplying the latest stack test by the appropriate parameters of operation for each day. Testing is required once every five years.

(2) SO_2 Emissions

DAILY LIMIT:

Combined emissions of SO_2 from all fuel burning process equipment, including the Sulfur Recovery Unit Tail Gas Incinerator, shall be no greater than 4.714 tons per day.

SO_2 emissions for the fuel burning process units shall be determined by applying the appropriate emission factors to the relevant quantities of fuel burned.

Fuel Oil - The weight percent sulfur and the fuel oil density shall be recorded for each day any fuel oil is combusted. Fuel oil may be combusted only during periods of natural gas curtailment.

Compliance with mass emission rates for the (51-6) CO Boiler shall be determined by multiplying the results of the latest stack test by the volumetric flow rate and any necessary conversion factors to give the results in the specified units of the emission limitation. Testing is required once every five years. Compliance with Subsection IX.H.1.h(1)(d) above shall be determined as part of each test. Alternatively, SO_2 emissions from the (51-6) CO Boiler may be determined using a Continuous Emissions Monitor (CEM) that meets the requirements of R307-170.

Daily sulfur dioxide emissions from the SRU/TGI shall be determined by multiplying the sulfur dioxide concentration in the flue gas by the mass flow of the flue gas.

(3) NO_X Emissions:

(a) *DAILY LIMIT:*

Combined emissions of NO_X from all fuel burning process equipment, including the Sulfur Recovery Unit Tail Gas Incinerator, shall be no greater than 2.20 tons per day.

i. INTERSTATE BRICK

(1) Emissions to the atmosphere from the indicated emission point shall not exceed the following rate:

(a) Scrubber Emissions - Tunnel Kiln #1:

(i) PM_{10}	0.150 tons/day
(ii) SO_2	0.120 tons/day
(iii) NO_X	0.209 tons/day

(b) Scrubber Emissions - Tunnel Kiln #3:

(i) PM_{10}	0.288 tons/day
(ii) SO_2	0.144 tons/day
(iii) NO_X	0.310 tons/day

(c) Scrubber Emissions - Tunnel Kiln #4:

(i) PM_{10}	0.458 tons/day
(ii) SO_2	0.216 tons/day
(iii) NO_X	0.150 tons/day

Compliance with the daily mass emission limits shall be demonstrated by multiplying the most recent stack test results, along with any necessary conversion factors, by the appropriate hours of operation for each day. Hours of operation shall be determined by supervisor monitoring and maintaining an operations log.

(2) Stack testing shall be performed as specified below:

POLLUTANT	*TEST FREQUENCY*
PM_{10} (Kilns #1, 3, & 4)	every 5 years after initial compliance test
NO_X (Kilns #1, 3, & 4)	every 5 years after initial compliance test
SO_2 (Kilns #1, 3, & 4)	every year

k. KENNECOTT UTAH COPPER: POWER PLANT and TAILINGS IMPOUNDMENT

(1) *UTAH POWER PLANT*

The following requirements are applicable unless and until the owner/operator has complied with the requirements set forth in Subsection (f) below.

(a) During the period from November 1, to the last day in February, inclusive, the following conditions shall apply:

(i) The four boilers shall use only natural gas as a fuel, unless the supplier or transporter of natural gas imposes a curtailment. The power plant may then burn coal, only for the duration of the curtailment plus sufficient time to empty the coal bins following the curtailment.

(ii) Fuel usage shall be limited to the following:

(A) 40 million cubic feet per day of natural gas;
(B) 1,370 tons per day of coal, only during curtailment of natural gas supply

(iii) *NATURAL GAS USED AS FUEL:*

Except during a curtailment of natural gas supply, emissions to the atmosphere from the indicated emission point shall not exceed the following rates and concentrations:

(A) For each of boilers no. 1, 2, & 3:

NO_X	1.91 ton/day

(B) For boiler no. 4:

NO_X	3.67 ton/day

(iv) *COAL USED AS FUEL:*

Emissions to the atmosphere from the indicated emission point shall not exceed the following rates and concentrations:

(A) For each of boilers no. 1, 2, & 3:

(I) PM_{10}	0.208 ton/day
(II) NO_X	2.59 ton/day

(B) For boiler no. 4:

(I) PM_{10}	0.402 ton/day
(II) NO_X	4.52 ton/day

(ii) An Approval Order is issued that authorizes implementation of the approach set forth in the Notice of Intent.

(iii) Notwithstanding the requirements specified in R307-401, the Notice of Intent must demonstrate that the technologies specified in the Approval Order would represent Reasonably Available Control Measures (RACM), as required by Section 172(c)(1) of the Clean Air Act.

(iv) To the extent that the current SIP requirements outlined above in conditions (a) - (e) above have been relied upon by the Utah SIP to satisfy Section 172(c)(4) or Section 175A(a) of the Clean Air Act, demonstrate that the technologies specified in the Approval Order would also provide for attainment or maintenance of the National Ambient Air Quality Standards. The demonstration required in this paragraph may incorporate modeling previously conducted by the State for the purpose of a maintenance demonstration.

(v) The technologies specified in the Approval Order have been installed and tested in accordance with the Approval Order.

(vi) The terms and conditions of the Approval Order implementing the approach set forth in the Notice of Intent have been incorporated into a Title V Operating Permit, in accordance with R307-415.

(vii) As of the effective date of the Operating Permit, the PM_{10} SO_2 and NO_x emissions limits for the Utah Power Plant boilers, including applicable monitoring requirements, set forth in that permit as most recently amended , shall become incorporated by reference into the Utah SIP. Henceforth, those terms and conditions specified in the Operating Permit shall supersede conditions (a) - (e) above.

(2) *TAILINGS IMPOUNDMENT:*

Title V Operating Permit # 3500346001, as most recently amended and to the extent that it applies to the Tailings Impoundment, is hereby incorporated by reference and made part of the Utah SIP.

(ii) In addition to the stack test required to measure PM_{10} in (b) above, the permittee shall calibrate, maintain and operate a system to continuously measure emissions of particulate matter from the main stack. For purposes of determining compliance with the emission limit, all particulate matter collected shall be reported as PM_{10}. Compliance with the main stack emission limit for PM_{10} shall be demonstrated using the smelter main stack continuous particulate sampling system to provide a 24-hour value. The permittee may petition the Air Quality Board at any time to discontinue the operation of the continuous monitor. An analysis of the potential PM_{10} uncontrolled emissions from the main stack shall be submitted to the Executive Secretary at the time of such a petition.

(iii) The owner/operator shall install, calibrate, maintain, and operate continuous monitoring systems on the acid plant tail gas.

(iv) All monitoring systems shall comply with all applicable sections of R307-170.

(v) KUC shall maintain records of all measurements necessary for and including the expression of PM_{10}, SO_2 and NO_X emissions in terms of pounds per hour. Emissions shall be calculated at the end of each day for the preceding 24 hours for PM_{10}, SO_2 and NO_X and calculated at the end of each hour for the preceding three-hour period for SO_2. Results for each measurement or monitoring system and reports evaluating the performance of such systems shall be summarized and shall be submitted to the Executive Secretary within 20 days after the end of each month.

(d) Visible emissions from the following emission points shall not exceed the following values:

(i) Smelter Main Stack (stack 11) 20% opacity

(ii) Acid Plant Tail Gas 15% opacity

(iii) Sources equipped with continuous opacity monitors (acid plant tailgas and main stack) shall use the compliance methods contained in 40 CFR 60.11.

(e) All gases produced during smelting and/or converting which enter the primary gas handling system shall pass through an online sulfuric acid plant. During the start-up/shutdown process of any equipment, the gas emissions shall be ducted, as necessary, either to the acid plant or to the secondary scrubber for control.

(i) Records required for this permit condition will serve as monitoring.

(ii) A log shall be kept of any time the gases produced during smelting and/or converting are not passed through an online sulfuric acid plant. An additional log shall be kept and include the dates, times and durations of all times any gases from smelting and/or converting bypass both the acid plant and the secondary gas system.

(iii) There are no reporting requirements for this provision.

(f) The owner/operator shall employ the following measures for reducing escape of pollutants to the atmosphere and to capture emissions and vent them through a stack or stacks:

the emission limitation by the second boiler shall be determined by the stack test of the first boiler.

(c) The owner/operator shall use only natural gas or landfill gas as a primary fuel in the boilers. The boilers may be equipped to operate on #2 fuel oil; however, operation of the boilers on #2 fuel oil shall only occur during periods of natural gas curtailment and during testing and maintenance periods. Operation of the boilers on #2 fuel oil shall be reported to the Executive Secretary within one working day of start-up. Emissions resulting from operation of the boiler on #2 fuel oil shall be reported to the Executive Secretary within 30 days following the use of #2 fuel oil in the boilers.

n. **PAYSON CITY POWER**

(1) NO_X emissions from the operation of all engines combined shall not exceed 1.54 tons per day.

The number of kilowatt hours generated by each engine shall be recorded on a daily basis. Emission factors shall be derived from the most recent emission test results.

(2) NO_X emissions from the operation of all engines combined shall not exceed 268 tons per 12-month period.

The number of kilowatt hours generated by each engine shall be recorded on a daily basis. Compliance with the daily mass emission limits shall be demonstrated by multiplying emission factors (in units of mass per kw-hr,) determined for each engine by the most recent stack test results, by the respective kilowatt hours generated each day.

(3) The emission factors necessary to determine compliance with conditions (1) and (2) above shall be determined by stack test, to be performed at least once every three (3) years.

(4) Visible emissions shall be no greater than 10 percent opacity except for 15 minutes at start-up and shutdown. When straight diesel fuel is used, visible emissions shall be no greater than 20 percent opacity except for 15 minutes at start-up and shutdown .

p. SPRINGVILLE CITY CORPORATION

(1) (a) NO_X emissions from the operation of all engines at the plant shall not exceed 1.68 tons per day.

(b) NO_X emissions from the operation of all engines at the plant shall not exceed 248 tons per 12-month period.

(2) Compliance with the above limitations shall be determined by a continuous emissions monitoring system (CEM) meeting the requirements of R307-170. Daily NO_X emissions shall be calculated for each individual engine and summed into a monthly output. The monthly outputs shall be summed into a rolling 12-month total of NO_X in tons/year. The owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of emissions shall be kept for all periods when the plant is in operation.

(3) NO_X Emissions

(a) *DAILY LIMIT:* Combined emissions of NO_X from all fuel burning process equipment, including the K1 Compressors, shall be no greater than 1.988 tons per day.

Compliance shall be determined daily by multiplying the appropriate emission factor by the relevant parameter (e.g. hours of operation, feed rate, or quantity of fuel combusted) at each affected unit, and summing the results.

The emission factor for the Ultraformer Furnace (stack F1) shall be determined by stack test. Testing shall be performed once each year.

The emission factor for the Crude Unit Furnace (stack H-101) shall be determined by stack test. Testing shall be performed once every three years.

The emission factors for both trains of the cogeneration facility shall be determined by stack test. Testing shall be performed at each train once every two years, with one train tested each year.

(b) Emissions of NO_X from each K1 compressor shall be no greater than 3.20 lb/hr.

(c) *12-MONTH LIMIT:* Emissions of NO_X from all fuel burning process equipment, including the K1 Compressors, shall be no greater than 598 tons per rolling twelve-month period.

IX.H.3. Establishment of Alternative Requirements

a. Alternative Requirements.

In lieu of the requirements imposed pursuant to Subsections IX.H.1 and 2 above, a facility owner may comply with alternative requirements, provided the requirements are established pursuant to the permit issuance, renewal, or significant permit revision process found in R307-415 and are consistent with the streamlining procedures and guidelines set forth in Subsections b and c below. These procedures and guidelines are drawn from section II.A. of EPA's *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, dated March 5, 1996.

For the sources subject to R307-415, an alternative requirement is approved for the source by the executive secretary and the EPA if it is incorporated in an issued part 70 permit to which EPA has not objected. Any public comments concerning the alternative will be transmitted to EPA with the proposed permit. The executive secretary's determination of approval is not binding on the EPA.

b. Demonstrating Equivalency of an Alternative Requirement.

The source shall demonstrate that the alternative requirement is as or more stringent than the existing SIP requirement, considering, among other things, the following:

(1) For emission limits:

(a) Emission limits should be converted to a common format/units of measure so that a direct comparison can be made. If not, a valid, detailed correlation must be demonstrated between different formats/units so that a comparison is possible.

(b) Are compliance dates as or more stringent (earlier or more frequent)?

(c) Are averaging times as or more stringent?

(d) Are transfer or collection efficiencies as or more stringent?

(e) Will the same pollutants be regulated to the same or greater extent?

(f) Are any exceptions/defenses as or more limited?

(g) Are associated test methods as or more stringent

(2) For work practice standards:

(a) Are base elements the same (e.g., if the original rule addresses frequency of inspection and recordkeeping, does the new rule address these same elements?) and are requirements relating to these elements as or more stringent?

(b) The comparison should be for each individual emissions unit. The comparison should not analyze across multiple emissions units.

(c) Are compliance dates as or more stringent (earlier or more frequent)?

(d) Are averaging times, if any, as or more stringent?

(e) Will the same pollutants be regulated to the same extent?

(4) The executive secretary will notify EPA if a source has requested an equivalent emission limitation. The equivalence demonstration and supporting documentation will be transmitted to EPA as soon as it is available and in advance of draft permit issuance. These materials will also be available for public review in accordance with R307-415-7i(2).

Amend 307

2-sided

New Rule:
R307-421

Informational Items

Appeal

2 sided

NSR

Schedule

2-Sided

C SO2

Draft 2003 Regional SO_2 Emissions and Milestone Report

January 31, 2005

Comments on this draft report should be provided to the appropriate jurisdictional contact(s) provided below. Closing dates for public comment will vary by jurisdiction, but are expected to occur close to March 11, 2005. Please refer to the appropriate public notice or personal contact below for an official due date.

Arizona

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1110 West Washington Street
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dam@azdeq.gov

City of Albuquerque

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January 31, 2005

Draft 2003 Regional SO_2 Emissions and Milestone Report

Executive Summary

Under Section 309 of the federal Regional Haze Rule, nine western states and tribes within those states have the option of submitting plans to reduce regional haze emissions that impair visibility at 16 Class I national parks and wilderness areas on the Colorado Plateau. Five states – Arizona, New Mexico, Oregon, Utah and Wyoming – exercised this option by submitting plans to EPA prior to the deadline for states to opt in, December 31, 2003. The tribes were not subject to that deadline and still can opt into this program. Under the Section 309 plans, these five states have begun to implement an SO_2 Milestone and Backstop Trading Program. The Western Regional Air Partnership (WRAP) is assisting these states with the implementation and management of this regional emission reduction program.

As part of this program, the participating states must submit an annual Regional Sulfur Dioxide (SO_2) Emissions and Milestone Report beginning in 2004 for the calendar year 2003. A milestone is a maximum level of annual emissions for a given year. The milestone for 2003 was set at 447,383 tons for the five state region. The states of Arizona, New Mexico, Oregon, Utah, and Wyoming report 318,702 tons of actual SO_2 emissions. The total emissions increase to 329,455 tons of SO_2 emissions after making adjustments to account for changes in monitoring and calculation methods.

The adjustments to actual emissions were required so that the 2003 emission estimates were comparable to the emission monitoring or calculation method used in the base year inventory (1999 for utilities and 1998 for all other sources) to determine future year emission milestones. The preliminary adjustments result in an additional 10,753 tons of SO_2 emissions, which is about 3% of the actual emissions. Adjustments required for changes in Part 75, Acid Rain Program, flow monitor quality assurance methods account for about 99% of the adjustment increase, with the remaining from other types of monitoring and calculation methodology changes.

Based on the adjusted milestone and emissions data, 2003 emissions were about 25% below the 2003 five state regional milestone.

Based on the preliminary adjusted annual emissions estimate, a preliminary determination has been made that the five states have met the 2003 regional SO_2 milestone of 447,383 tons. The 447,383 ton milestone was determined as described in Section 51.309(h)(1)(i) and the 309 State Implementation Plans (SIPs). The milestone includes an adjustment to the base milestone to subtract emissions for western states not participating. The SIPs contain additional provisions to adjust the milestones to reflect variations in smelter operations, and to account for enforcement actions (to reduce the milestones where an enforcement action identified that emissions in the baseline period were greater than allowable emissions). Based on the states' information, the 2003 period requires a 480 tons smelter adjustment, but no adjustments at this time for enforcement actions.

The SIPs also require the annual report to identify changes in the source population from year to year and also significant changes in a source's emissions from year to year. Because 2003 was the first year of reporting, this type of source change or exception information is not applicable for this first annual report. The states decided, however, to include in this report (for informational and tracking purposes) a list of facilities added to or removed from the list of subject sources included in the base year inventories. This information is provided in Section 6 of this report.

Table ES-1: Overview of 2003 Regional Milestone and Emissions for Section 309 Participating States

2003 Sulfur Dioxide Milestone	
Base Regional 2003 Milestone*	682,000 tons
Adjustments**	
States and Tribes not Participating in the Program	-235,097 tons
Smelter Operations	480 tons
Enforcement	0 tons
Adjusted 5-State 2003 Milestone	447,383 tons
2003 Sulfur Dioxide Emissions	
Actual 5-State 2003 Emissions	318,702 tons
Adjustments***	
Part 75 Flow Rate Procedures	10,640 tons
Other Emission Monitoring and Calculation Methods	113 tons
Adjusted 5-State 2003 Emissions	329,455 tons
Comparison of Emissions to Milestone	
Adjusted 2003 Emissions	329,455 tons
Adjusted 2003 Milestone	447,383 tons
Difference (negative value = emissions < milestone)	-117,928 tons
2003 Emissions as Percent of 2003 Milestone	74 %

* See 40 CFR 51.309(h)(1), Table 1, Column 3, and the Regional Milestones section of each state's 309 SIP. (applies if neither the BHP San Manuel nor the Phelps Dodge smelter facilities resume operation).

** See 40 CFR 51.309(h)(1)(i), and (ii), and (v)-(viii), and the Regional Milestones section of each state's 309 SIP.

***See 40 CFR 51.309(h)(1)(iii) and (iv), and the Annual Emissions Report section of each state's 309 SIP.

Coed

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET- SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

MAR - 4 2005

Ref: 8P-AR

Dianne R. Nielson, Ph.D
Executive Director
Department of Environmental Quality
288 North 1460 West
P.O. Box 144810
Salt Lake City, Utah 84114-4810

Dear Dr. Nielson:

I'm writing to inform you of EPA's plan for review of the Utah and Salt Lake County PM_{10} Maintenance Plan. Since the Utah Department of Air Quality (UDAQ) is in the process of finalizing this Plan and will present it to the Air Quality Board for their consideration at the March 9, 2005 Board meeting, I thought it important to let you know how EPA intends to comment on this Plan.

We appreciate your efforts to develop a maintenance plan to redesignate Utah County and Salt Lake County to attainment for PM_{10}. However, our Air Program has not been provided a complete draft maintenance plan and accompanying regulations, which precludes us from determining before the Board's March 9th meeting whether our past concerns have been addressed. In particular, we are unable to confirm that the significant issues EPA identified in our letter of April 18, 2002, and in subsequent letters have been addressed sufficiently. We intend to send a letter to UDAQ by March 9th restating those concerns and updating our understanding of UDAQ's responses to date. We understand that there is no requirement that UDAQ share with EPA draft SIP revisions before proposing them to the Board. However, UDAQ and EPA have agreed in the past that it is difficult for UDAQ to receive EPA comments at the end of the process.

Also, because the ensuing 30-day comment period that will precede the Board's approval is so short, EPA will have limited time to do a full review and substantive comments will most likely be raised again after UDAQ submits the Plan for EPA approval.

Should you have any questions, I invite you to contact me at our toll free number 1-800-227-8917. Your staff may also wish to Contact Richard Long, Director of our Air and

March 3, 2005

Mr. Jeffrey Holmstead
Assistant Administrator, Air & Radiation
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW, Room 5406
Washington, DC 20004

Dear Mr. Holmstead:

In December 2003, each of our states submitted to EPA a regional haze plan implementing the recommendations of the Grand Canyon Visibility Transport Commission (GCVTC), which began its work in 1991. A central element of these "Section 309" state implementation plans is a market-based approach for reducing and capping sulfur dioxide emissions from industrial sources.

This program to implement the GCVTC's recommendation of a 50-70% reduction in sulfur dioxide emissions by 2040 was adopted by consensus of Western states, tribes, and federal agencies participating in the Western Regional Air Partnership (WRAP), and was developed in partnership with Western industries and environmental groups.

Given the level of effort that went into developing this program, and our belief that it is the right program for our states, we were certainly disappointed in the February 18, 2005 decision in *CEED v. EPA*. Nevertheless, we were encouraged that the court's decision upholds the ability of states to develop market-based alternatives to source-by-source controls for those facilities that are subject to the best available retrofit technology (BART) requirements of the regional haze rules.

While the court had concerns with some of the analytical methods that were used to evaluate the benefits of our SO2 program because of similarity to methods the court struck down in the *American Corn Growers* case, we believe we can remedy this problem once EPA revises the regional haze rules to address the *American Corn Growers* decision.

We understand that EPA will promulgate new BART rules for regional haze by April 15 of this year. Once that happens, we will work together and with EPA to determine what additional analysis of our SO2 program is needed so that EPA can move forward with approval of our Section 309 state implementation plans for regional haze as quickly as possible.

Staffed by:
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In the meantime, we would like to engage with EPA as co-regulators to discuss the court's decision and determine the appropriate steps to remedy any issues that stand in the way of implementing our regional approach for improving visibility at our nation's treasured Class I areas.

Thank you for your ongoing support of our efforts. We remain confident that working together we can continue to develop and implement air quality programs that make sense for the West.

Sincerely,

Stephen A. Owens
Director
Arizona Department of Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director
Utah Department of Environmental Quality

Andrew Ginsburg
Air Quality Administrator
Oregon Department of Environmental Quality

Ron Curry
Cabinet Secretary
New Mexico Environment Department

John V. Corra
Director
Wyoming Department of Environmental Quality

Alfredo R. Santistevan
Director
Environmental Health Department
City of Albuquerque

Compliance

2-sided

Haps

2-sided

State of Utah

Department of Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

MEMORANDUM

TO: Utah Air Quality Board DAQH-0022-05

FROM: Richard W. Sprott, Executive Secretary

DATE: January 10, 2005

SUBJECT: Hazardous Air Pollutant Section Compliance Activities – December 2004

	12/04
Asbestos Demolition/Renovation Inspections	5
Asbestos in School Inspections	1
MACT Compliance Inspections	3
Other NESHAP Inspections	0
State Rules (Only) Inspections	0
Asbestos Notifications Accepted	71
Asbestos Phone Calls Answered	334
Asbestos Individuals Certifications: Approved/Disapproved	55/0
Company Certifications/Re-certifications	0/51
Alternate Asbestos Work Practices: Approved/Disapproved	4/0
Lead Based Paint (LBP) Inspections	6
LBP Notifications Approved	0

State of Utah

Department of Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

MEMORANDUM

TO: Utah Air Quality Board DAQH-0140-05

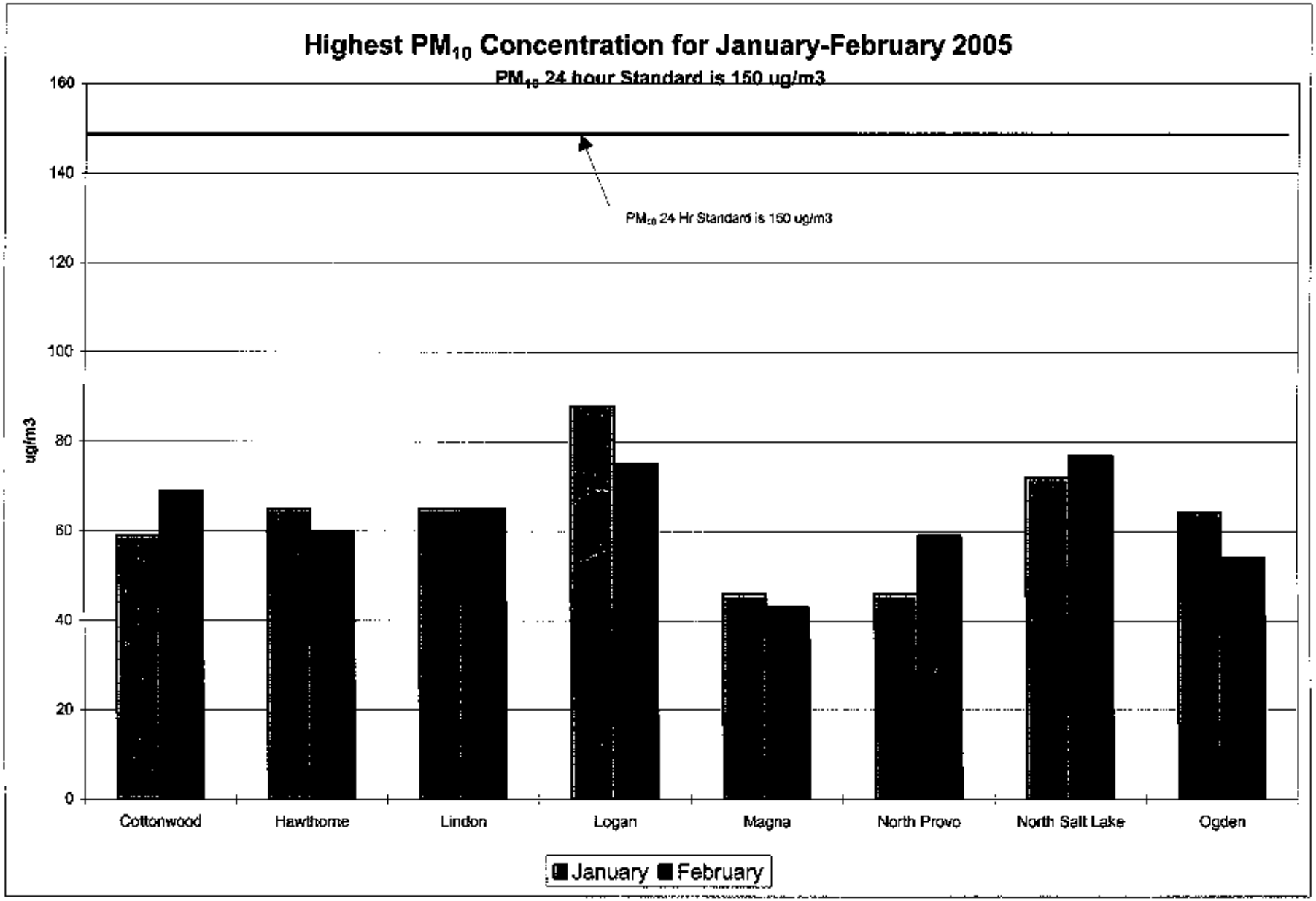
FROM: Richard W. Sprott, Executive Secretary

DATE: February 11, 2005

SUBJECT: Hazardous Air Pollutant Section Compliance Activities – January 2005

	1/05
Asbestos Demolition/Renovation Inspections	2
Asbestos in School Inspections	15
MACT Compliance Inspections	2
Other NESHAP Inspections	0
State Rules (Only) Inspections	0
Asbestos Notifications Accepted	62
Asbestos Phone Calls Answered	339
Asbestos Individuals Certifications: Approved/Disapproved	81/0
Company Certifications/Re-certifications	0/17
Alternate Asbestos Work Practices: Approved/Disapproved	3/0
Lead Based Paint (LBP) Inspections	1
LBP Notifications Approved	1

Monitoring



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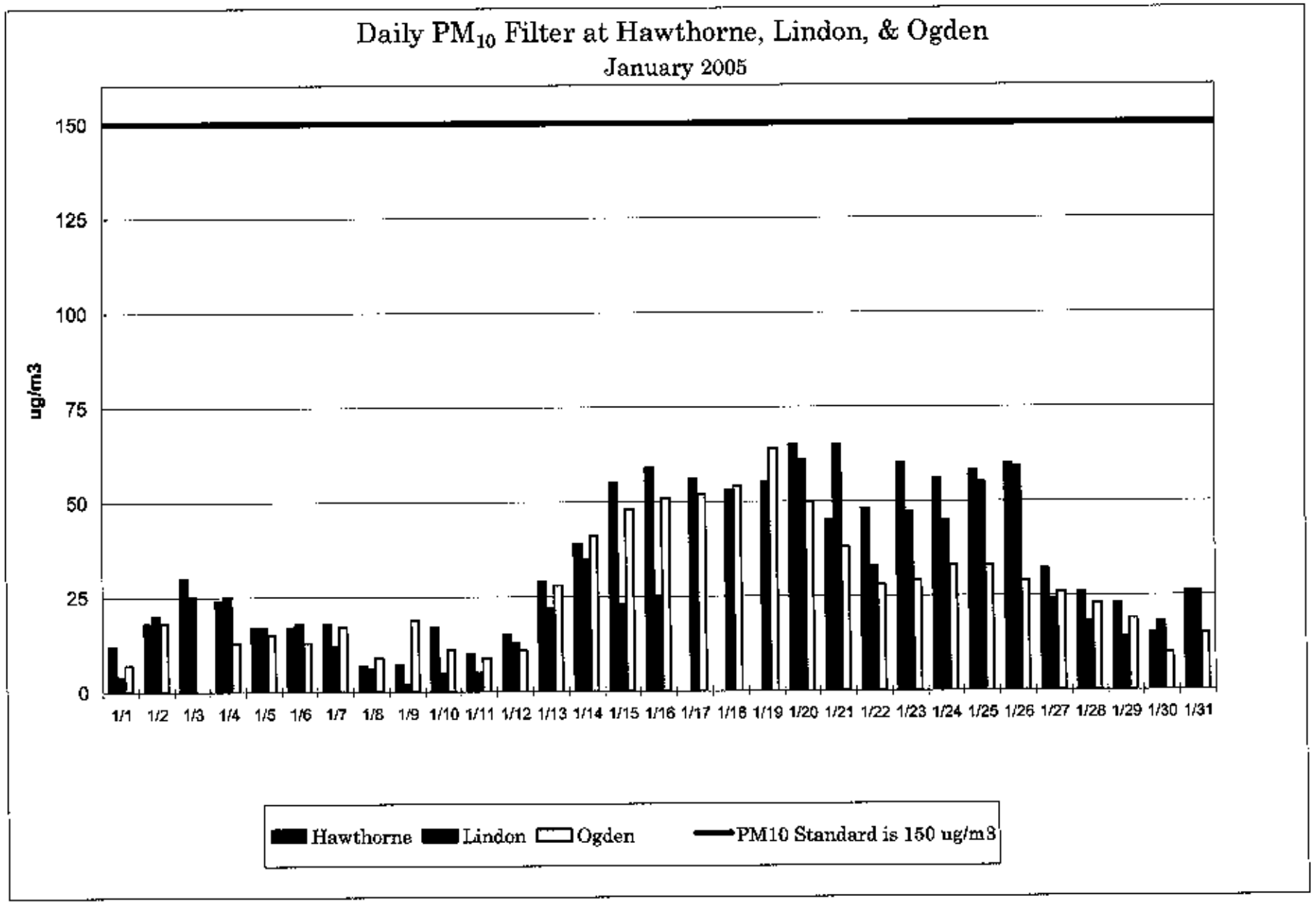

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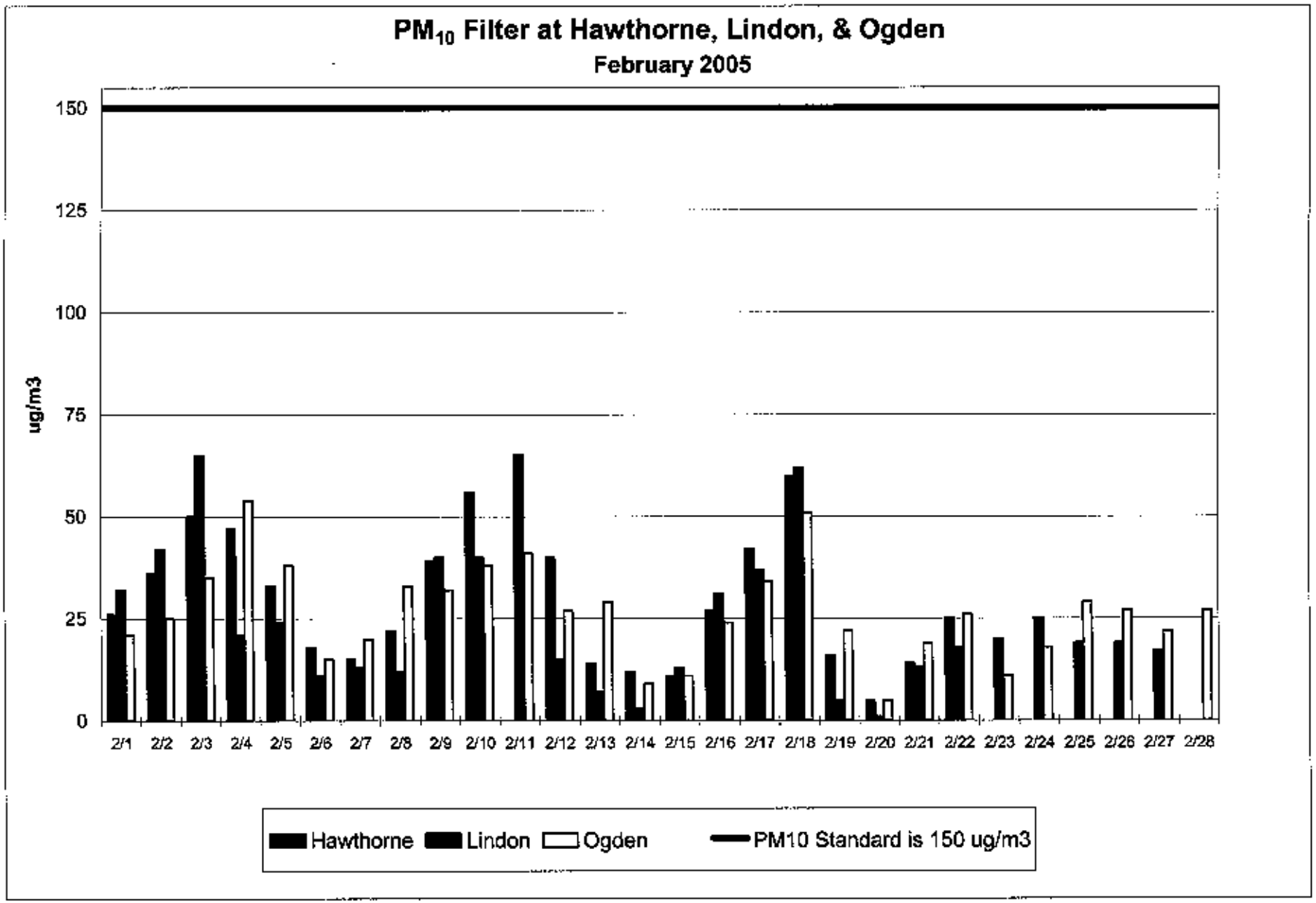

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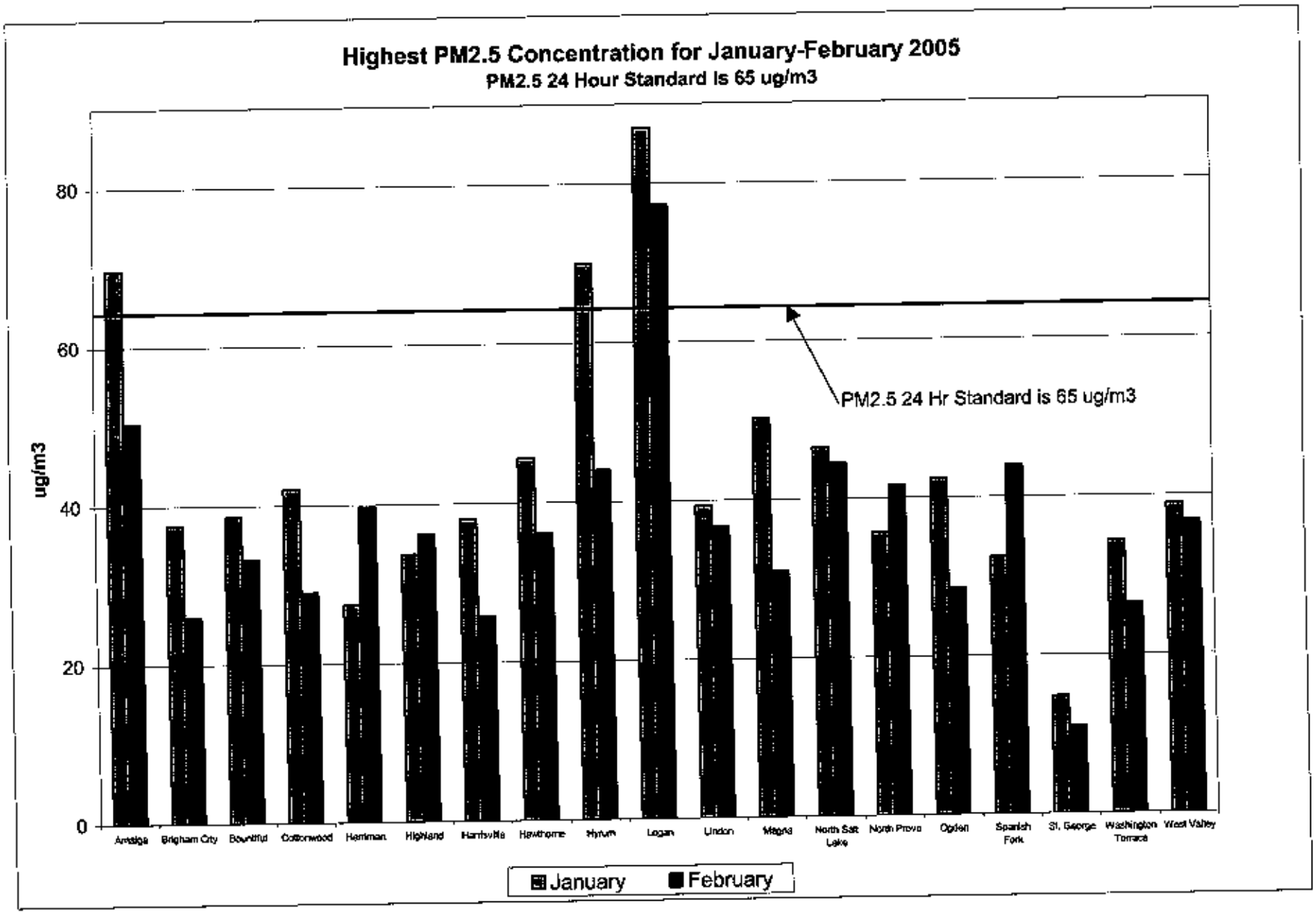

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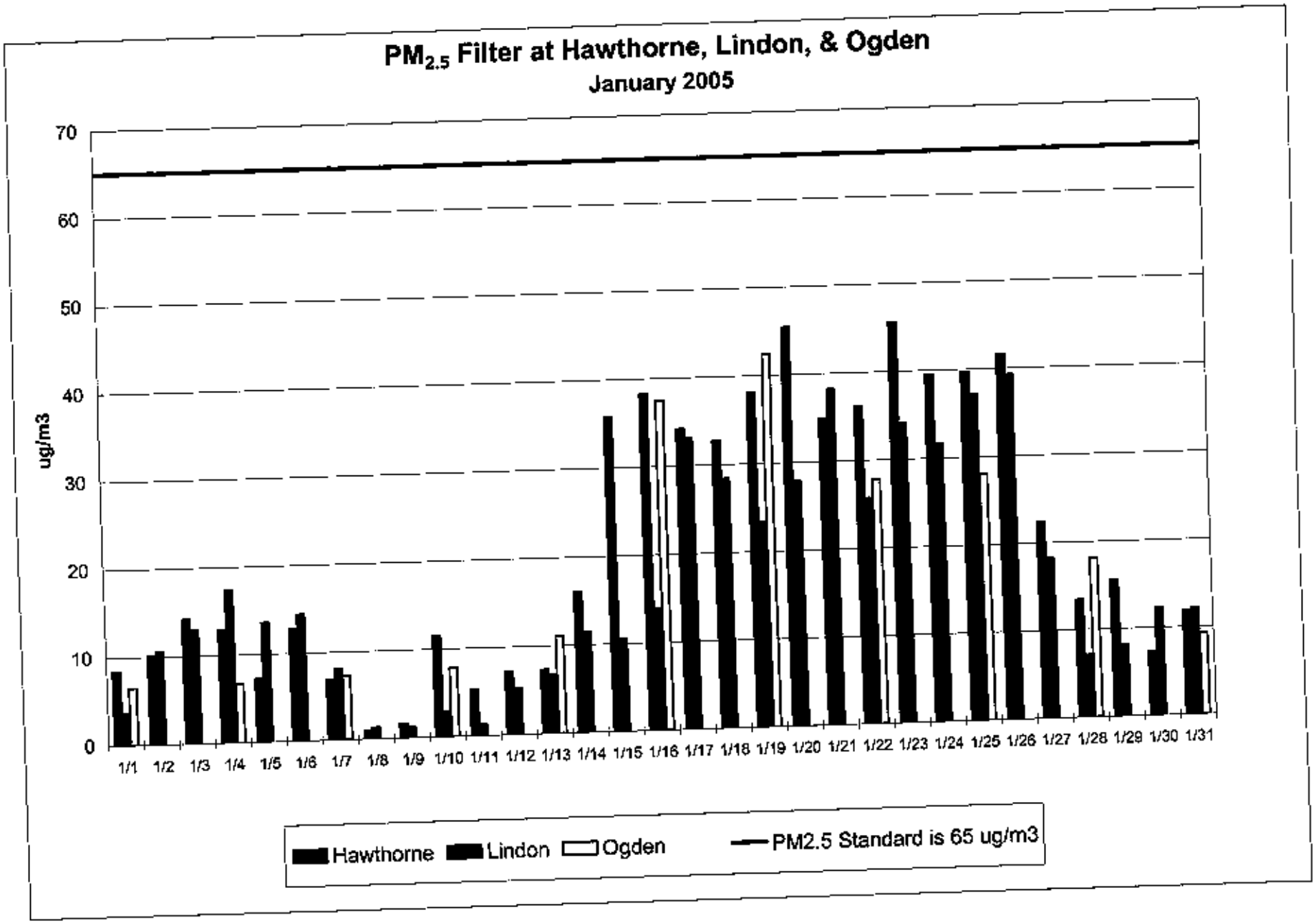

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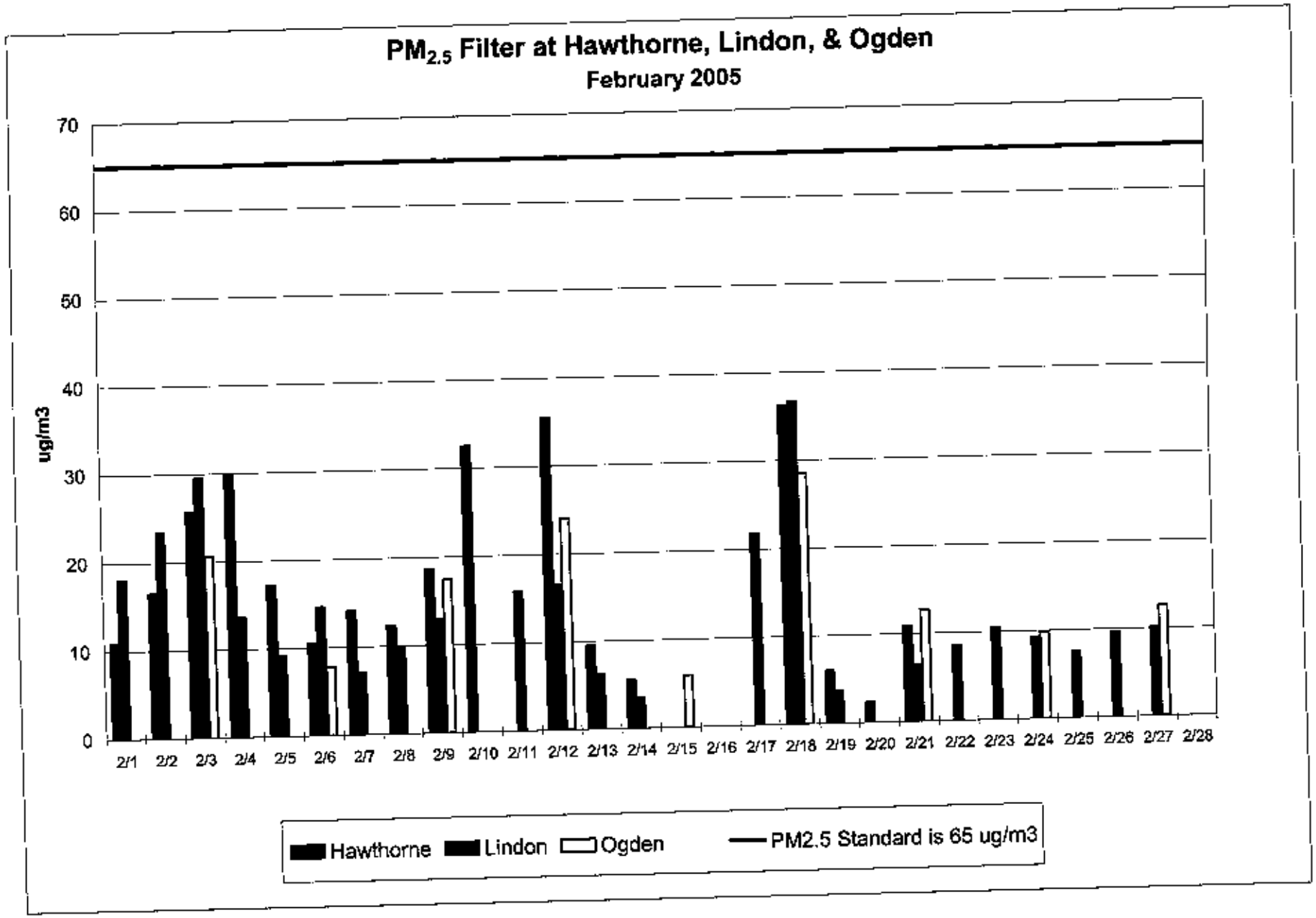
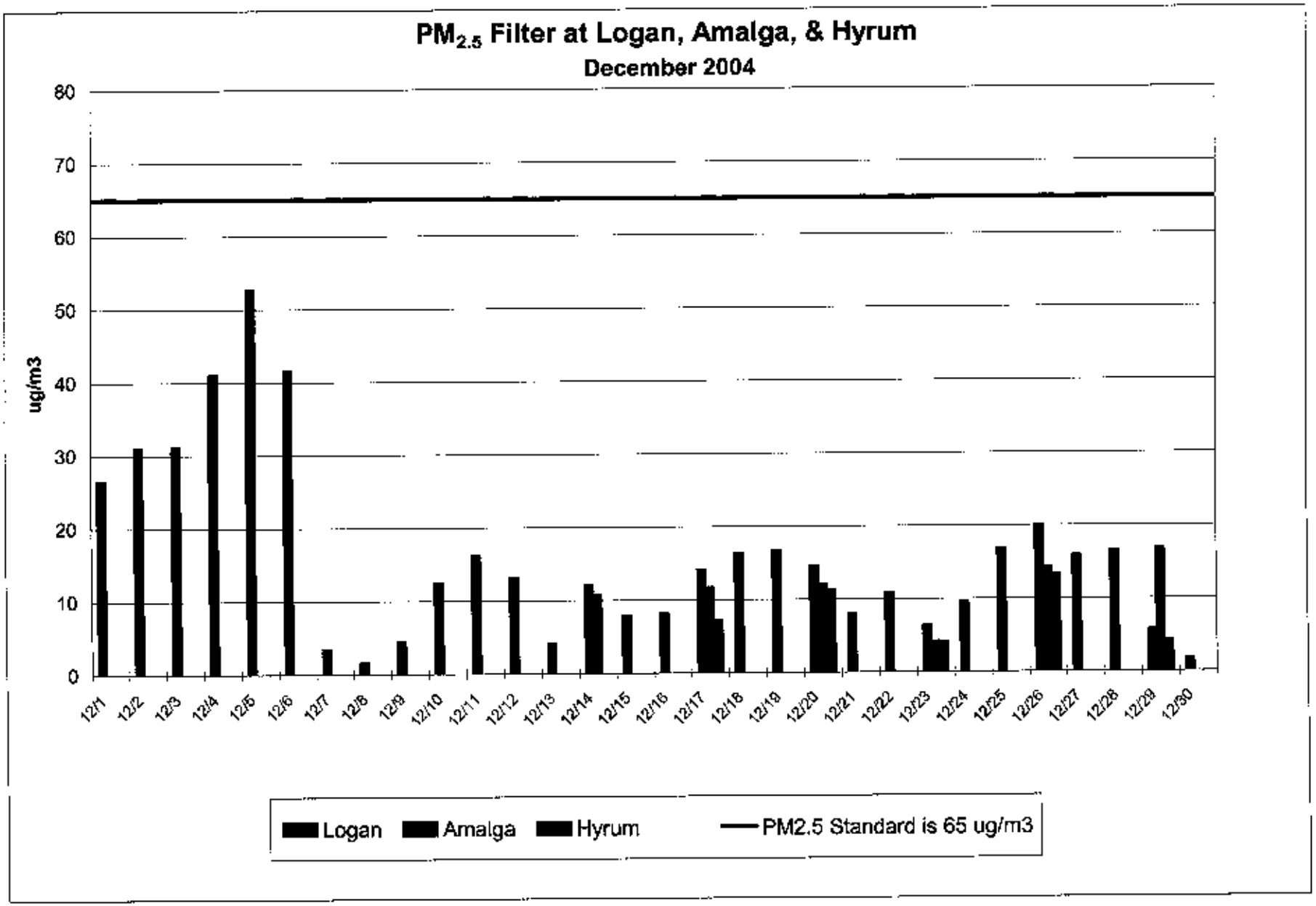


Utah Division of Air Quality

SUMMARY

WOOD BURNING CONTROL PROGRAM

	WINTER	SALT LAKE/DAVIS		UTAH COUNTY		WEBER COUNTY		CACHE COUNTY	
		Yellow	Red	Yellow	Red	Yellow	Red	Yellow	Red
PM2.5	2004-2005	21	2	0	0	0	0	21	19
	2003-2004	4	23	1	15	12	9	4	25
	2002-2003	4	2	0	0	0	0	1	1
	2001-2002	11	8	7	3	9	5	22	5
	2000-2001	15	10	2	4	5	0		
PM10	1999-2000	1	0	0	0	0	0		
	1998-1999	0	0	0	0	0	0		
	1997-1998	8	3	0	0	0	0		
	1996-1997	4	0	3	0	0	0		
	1995-1996	7	7	6	5	4	0		
	1994-1995	12	7	5	5	0	0		
	1993-1994	9	0	15	2	2	0		
	1992-1993	17	17	11	23	0	0		



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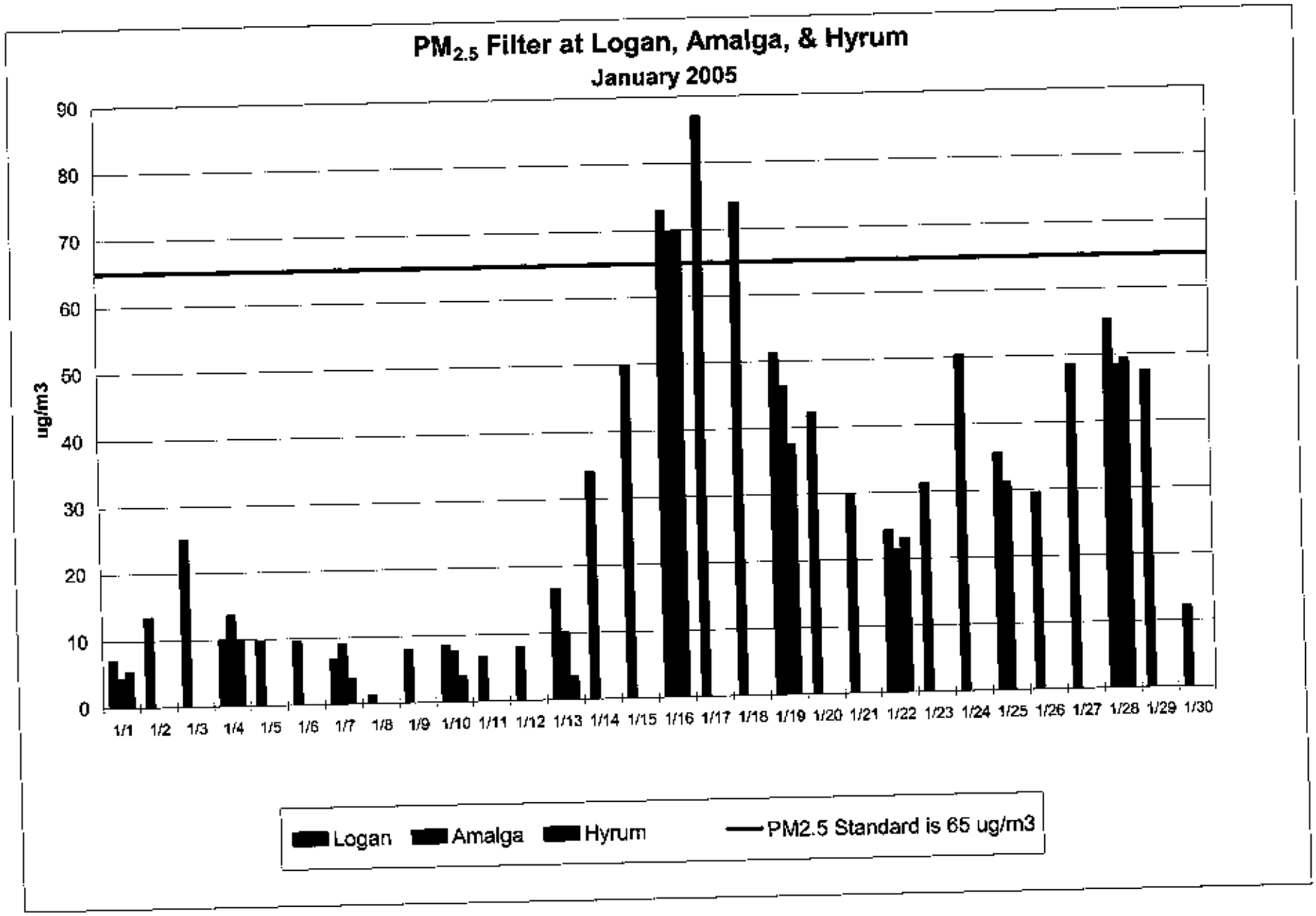

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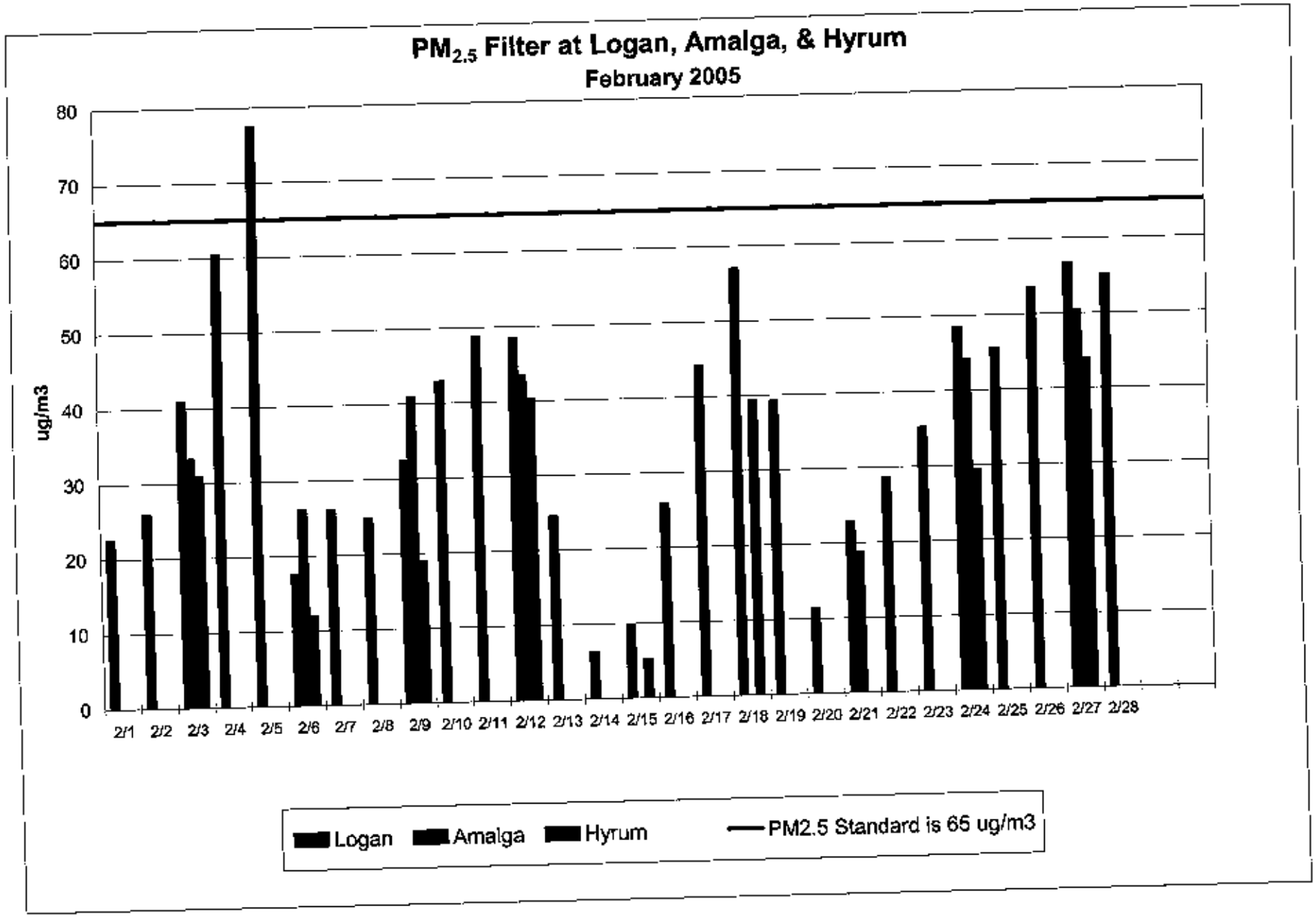

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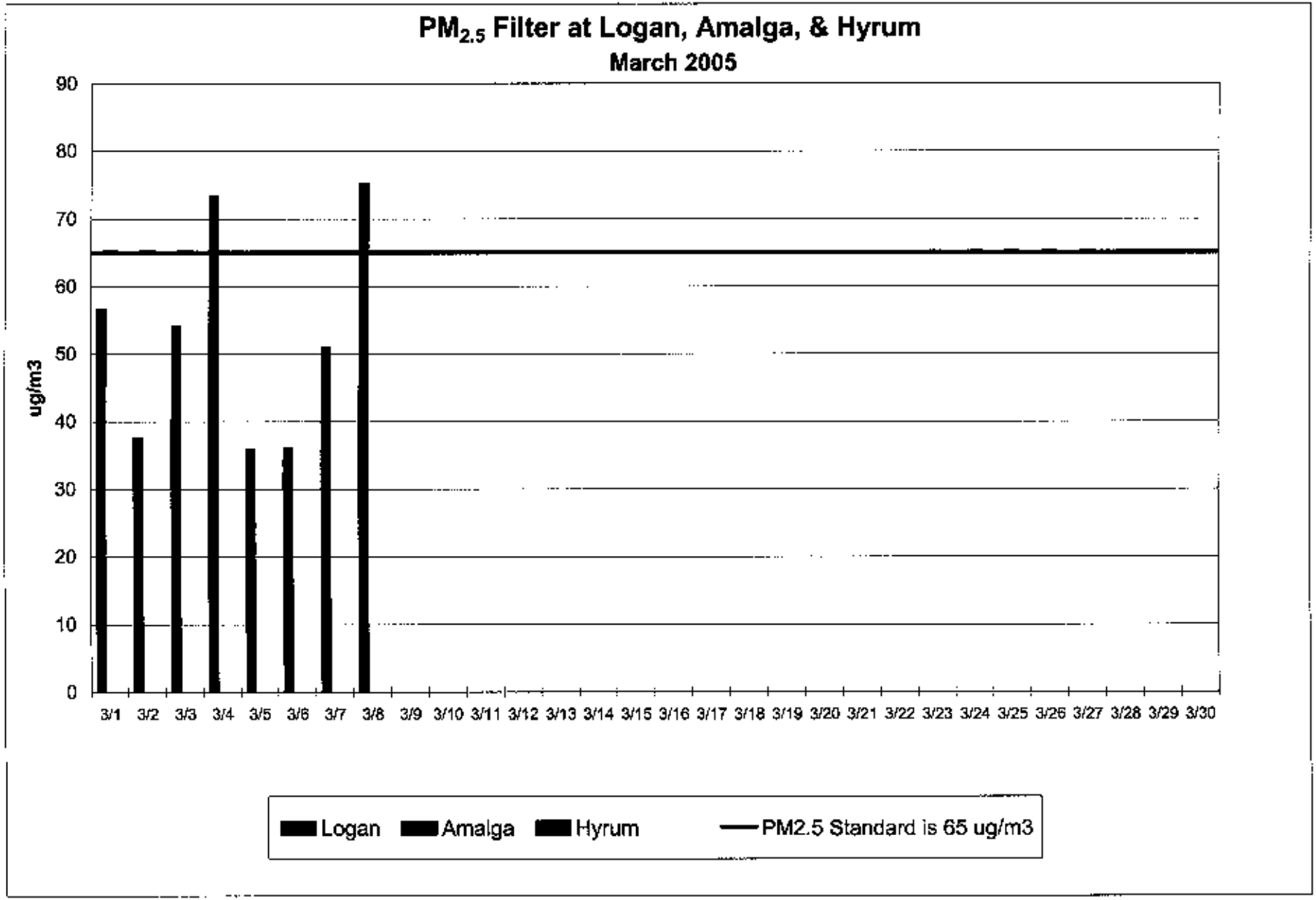

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